**20 April 2022**

MHS Genesis Appointment File

for the

MHS Data Repository (MDR)

(Version 1.00.08)

Future Specification

**Revision History**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Version** | **Date** | **Originator** | **Para/Tbl/Fig** | **Description of Change** |
| 1.00.00 | 3/26/2018 | Wendy Funk and Keith Hofmann | * Initial Document
 | * Initial Document
 |
| 1.00.01 | 4/24/18 | Keith Hofmann | * Table 1
* Table 2
 | * Clarified date used in LVM merge
* Added DMIS ID Table merge for Enrollment Site
* Renamed Financial Number, Medicare Eligibility, Residence Region, and Treatment Region variables
* Added discharge disposition and Millennium encounter key from encounter table merge
* Further specified how to handle records that do not match to the LVM and when to blank fill ACV and NDAA17 variables
* Added variables from Enrollment Site DMIS ID Table merge
* Improved capture in derivation of appt\_type
* Added legacy appointment status and appointment type (Cerner values mapped to CHCS values)
 |
| 1.00.02 | 5/29/18 | Keith Hofmann | * Table 2
 | * Renamed extract\_dt\_tm as extract\_dt\_tm\_utc and updt\_dt\_tm as updt\_dt\_tm\_utc
* Renamed all test indicators as flags (e.g. test\_person\_ind=test\_person\_flag) and online\_appt as online\_appt\_flag and walk\_in as walk\_in\_flag
* Renamed mtf\_par as mtf\_parent and enr\_par as enr\_parent
* Renamed prodline\_r (Product Line from Appointment Type) as appt\_prefix (Appointment Prefix from Appointment Type)
* Changed length of appt\_type to $16 and added mapping for appt\_type = Specialty Online to appt\_type\_legacy
* Added value of “Surgery” for appt\_type
 |
| 1.00.03 | 8/20/18 | Keith Hofmann | * Table 1
* Table 2
 | * Added merge to Event Attach file
* Added a third regular\_resource field
* Added the attending physician from the encounter file and further information about that provider
* Added the order number of the referral leading to this appointment using the Event Attach file
* Added descriptions of scheduling\_action\_ref used with Appointment Action file
* Added first and last booking action dates
* Changed mapping for appt\_stat\_legacy. “Checked In” now maps to 2 or 5 (based on walk\_in\_flag) instead of 1.
 |
| 1.00.04 | 10/4/18 | Keith Hofmann | * Section IV
* Section VI
 | * Clarified how appointments that have not yet occurred are filtered
* Described how merges to reference files work for appointments that have not yet occurred (Future years)
 |
| 1.00.05 | 12/12/18 | Keith Hofmann | * Table 2
 | * Updated derivation of Appointment Made Date
 |
| 1.00.06 | 1/18/19 | Keith Hofmann | * Table 2
 | * Added derivation for Primary Provider ID and Primary Provider Source
* Added merge to Personnel file for Primary Provider
 |
| 1.00.07 | 9/25/19 | Keith Hofmann | * Table 2
 | * Updated derivation of appt\_prefix, appt\_type, and appt\_type\_legacy to handle new values coming from Travis wave sites
 |
| 1.00.08 | 4/20/22 | Keith Hofmann | * Table 2
 | * Added new days\_until field (Length of Time Until Appointment)
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# MDR Genesis Appointment File

1. Source:

The source system is the Cerner Millenium. All records are based on records sent from WH\_CLN\_SCH\_APPOINTMENT file. In order to increase the utility of this file, it is merged against other tables from Cerner Millenium as well as other files on the MDR, as described below in Section VI.

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: SAS datasets containing all appointment records where the appt\_src\_beg\_dt\_tm is in a fiscal year. The Appointment files are stored at /mdr/pub/genesis/appointment/fyxx.sas7bdat

1. Receiving Filters

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

Records for appointments that have not yet occurred appear in the data, but in the MDR data sets, only appointments up to 45 days after the feed date are kept. The future FY should therefore be processed and published starting 45 days before the end of the FY. For example, if the current year is FY18, the FY19 file should be processed starting around 8/15/18.

1. Update Process

The primary key for the Appointment table is the SCH\_APPOINTMENT\_SK field. During the extraction of the raw Appointment records, de-duplication of records, or anytime an Appointment 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. Similar update processes are applied to the other raw data sets.

Once the raw data has been updated, the processor combines them as described here and 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 Appointment file. Table 1 describes the reference files that are used in processing.

**Table 1: Data Merges for MDR Genesis Appointment File**

| **Merge** | **Date Matching** | **Additional Matching** |
| --- | --- | --- |
| MDR Genesis Person File |  | person\_sk (most recent updt\_dt\_tm per person\_sk) |
| MDR Genesis Location File |  | scheduled\_loc=location\_sk |
| MDR Calendar File |  | sch\_appointment\_sk, most\_recent\_calendar\_ind=1  |
| MDR Genesis Personnel File |  | provid*i*=person\_sk |
| Appointment Action File |  | sch\_appointment\_sk |
| Encounter file |  | encounter\_key |
| Event Attach file |  | sch\_appointment\_sk |
| Code Value Outbound Reference |  | health\_system\_source\_id = 18635 and active\_ind = 1 |
| Master Person Index (MPI) |  | edipn, ssn, gender\_r, dob\_r, last\_name, first\_name |
| Longitudinal VM6 (LVM6) | Appointment date between the begin and end dates associated with the segment | EDIPN |
| DMIS ID Index Table | FY | mtf and denrsite (two separate merges) |
| OMNI-Cad | Year and month of CAD = appointment date | patzip, sponsvc |

Upon matching to the MDR Genesis Person file, MDR Genesis Personnel file, and MDR Genesis Location file, records that meet the following criteria are deleted:

* Records where the test\_person\_ind=1 in the MDR Genesis Person File.
* Records where any of the test\_personnel\_ind fields = 1 in the MDR Genesis Personnel File.
* Records where the test\_location\_ind=1 in the MDR Genesis Location File.
* Records where the appointment date is before the go live date for the location for the MTF.

When future FYs are processed, some of these reference files may not be available. For those years, skip the LVM merge, the DMIS ID Index table merge based on denrsite, and the Omni CAD merge. For the DMIS ID Index table merge based on mtf, if the future year is not available, use the most recent year. For example, if the current year is FY18, the future year is FY19, but the FY19 DMIS ID Index Table is not available, merge all FY19 data to the FY18 DMIS ID Index table.

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 Appointment file is stored in a SAS data set. Table 2 provides the file layout and processing rules.

**Table 2: File Layout for MDR Genesis Appointment File**

| **Field** | **Format** | **SAS Name** | **Source Element** | **Transformation** |
| --- | --- | --- | --- | --- |
| Scheduled Appt Key | $100 | sch\_appointment\_sk | sch\_appointment\_sk | No transformation |
| Scheduled Appt PI-EDW Key | 8. | sch\_appointment\_key | sch\_appointment\_key | No transformation |
| Scheduled Unit Location Code | $100 | scheduled\_loc | scheduled\_loc | No transformation |
| Scheduled Unit Location | $100 | scheduled\_loc\_txt | scheduled\_loc\_txt | No transformation |
| MHS Genesis Person ID | $100 | person\_sk | person\_sk | No transformation |
| Appointment Type Text | $255 | appt\_type\_txt | appt\_type\_synonym\_txt | No transformation |
| Encounter PI-EDW Key | 8. | encounter\_key | encounter\_key | No transformation |
| Appointment Date and Time | Date/Time | appt\_dt\_tm | appt\_src\_beg\_dt\_tm | Adjust from UTC to local time using appt\_src\_beg\_tm\_zn. |
| Extract Date to MDR | Date/Time | extract\_dt\_tm\_utc | extract\_dt\_tm | No transformation (leave in UTC) |
| Update Date/Time | Date/Time | updt\_dt\_tm\_utc | updt\_dt\_tm | No transformation (leave in UTC) |
| Appointment Status | $40. | appt\_stat | sch\_appointment\_state\_ref | Apply format from code\_value\_out\_ref where code\_set = 14233 |
| **Fields from the MDR GENESIS Person File** |  |  |  |  |
| EDIPN | $10. | edipn | N/A | edipn. If the MPI merge results in a different EDIPN for this SSN, fill with the EDIPN from the MPI. This only occurs if the original EDIPN was not found in the MPI. |
| SSN | $9. | ssn | N/A | ssn. If the MPI merge results in a different SSN for this EDIPN, fill with the SSN from the MPI. |
| First Name | $100. | first\_name | N/A | first\_name |
| Last Name | $100. | last\_name | N/A | last\_name |
| MRN | $40. | mrn | N/A | mrn |
| IPI | $10. | Ipi | N/A | ipi |
| Test Record Indicator (Person) | 8. | test\_person\_flag | N/A | test\_record\_ind |
| Gender of Record | $10. | gender\_r | N/A | gender |
| Date and Time of Birth of Record | Date/Time | dob\_r | N/A | dob |
| Race of Record | $41. | race\_r | N/A | race |
| Ethnic Group of Record | $1. | ethnic\_r | N/A | ethnic |
| ZIP Code of Record | $25. | patzip\_r | N/A | zip |
| Marital Status of Record | $20. | marital\_r | N/A | marital |
| **Fields from the MDR Genesis Location File** |  |  |  |  |
| Scheduled MTF DMIS ID | $4 | mtf | N/A | child\_dmis\_id |
| Scheduled MTF MEPS Code | $4 | meprs\_cd | N/A | meprs\_cd |
| Test Location Indicator | 8. | test\_location\_flag | N/A | test\_location\_ind |
| Genesis Go-Live Date | SAS Date | gen\_begin\_dt | N/A | gen\_begin\_dt |
| **Fields from the Calendar File** |  |  |  |  |
| Calendar Slot Begin Date/Time | Date/Time | slot\_beg\_dt\_tm | N/A | slot\_begin\_dt\_tm. Take from the first record for a given sch\_appointment\_sk with role\_meaning = ATTENDING, EXAMROOM, RESOURCE, SURGOP, or GRPSROLE. If none exist, take from the first record with role\_meaning = PATIENT. Adjust from UTC to local time using slot\_begin\_tm\_zn. |
| Calendar Slot End Date/Time | Date/Time | slot\_end\_dt\_tm | N/A | slot\_end\_dt\_tm. Take from the first record for a given sch\_appointment\_sk with role\_meaning = ATTENDING, EXAMROOM, RESOURCE, SURGOP, or GRPSROLE. If none exist, take from the first record with role\_meaning = PATIENT. Adjust from UTC to local time using slot\_end\_tm\_zn. |
| Calendar Slot Duration | 8. | duration | N/A | duration\_qty. Take from the first record for a given sch\_appointment\_sk with role\_meaning = ATTENDING, EXAMROOM, RESOURCE, SURGOP, or GRPSROLE. If none exist, take from the first record with role\_meaning = PATIENT. |
| Appointment Provider ID | $100. | provid1 | N/A | calendar\_slot\_prsnl. Take from first record (by role\_seq) for a given sch\_appointment\_sk that has calendar\_slot\_prsnl ne 0. If there is a tie by role\_seq, break it using sch\_calendar\_sk. |
| Provider 2 ID | $100. | provid2 | N/A | calendar\_slot\_prsnl. Take from second record (by role\_seq) for a given sch\_appointment\_sk that has calendar\_slot\_prsnl ne 0. If there is a tie by role\_seq, break it using sch\_calendar\_sk. |
| Provider 3 ID | $100. | provid3 | N/A | calendar\_slot\_prsnl. Take from third record (by role\_seq) for a given sch\_appointment\_sk that has calendar\_slot\_prsnl ne 0. If there is a tie by role\_seq, break it using sch\_calendar\_sk. |
| Provider 4 ID | $100. | provid4 | N/A | calendar\_slot\_prsnl. Take from fourth record (by role\_seq) for a given sch\_appointment\_sk that has calendar\_slot\_prsnl ne 0. If there is a tie by role\_seq, break it using sch\_calendar\_sk. |
| Provider 5 ID | $100. | provid5 | N/A | calendar\_slot\_prsnl. Take from fifth record (by role\_seq) for a given sch\_appointment\_sk that has calendar\_slot\_prsnl ne 0. If there is a tie by role\_seq, break it using sch\_calendar\_sk. |
| Regular Resource 1 | $100. | regular\_resource1 | N/A | Match Calendar file to Resource Detail File by resource\_dtl\_sk with resource\_type\_flg = 1, and return description (see MDR Genesis Calendar spec). Take from first record (by role\_seq) for a given sch\_appointment\_sk that has regular\_resource populated. If there is a tie by role\_seq, break it using sch\_calendar\_sk. If provid1 is populated, leave this field blank. |
| Regular Resource 2 | $100. | regular\_resource2 | N/A | Match Calendar file to Resource Detail File by resource\_dtl\_sk with resource\_type\_flg = 1, and return description (see MDR Genesis Calendar spec). Take from second record (by role\_seq) for a given sch\_appointment\_sk that has regular\_resource populated. If there is a tie by role\_seq, break it using sch\_calendar\_sk. If provid1 is populated, leave this field blank. |
| Regular Resource 3 | $100. | regular\_resource3 | N/A | Match Calendar file to Resource Detail File by resource\_dtl\_sk with resource\_type\_flg = 1, and return description (see MDR Genesis Calendar spec). Take from third record (by role\_seq) for a given sch\_appointment\_sk that has regular\_resource populated. If there is a tie by role\_seq, break it using sch\_calendar\_sk. If provid1 is populated, leave this field blank. |
| **Fields from the Encounter File** |  |  |  |  |
| Encounter Class | $40. | encounter\_class | N/A | encounter\_type\_class\_ref. Apply format from code\_value\_out\_ref where code\_set = 69. |
| Encounter Type | $40. | encounter\_type | N/A | patient\_type\_ref. Apply format from code\_value\_out\_ref where code\_set = 71. |
| Financial Number | $40. | fin | N/A | financial\_nbr |
| Discharge Disposition | $40. | discharge\_disposition | N/A | discharge\_disposition\_ref. Apply format from code\_value\_out\_ref where code\_set = 19. |
| Encounter Key | $100. | encounter\_sk | N/A | encounter\_sk |
| Encounter Attending Provider ID | $100. | provid\_enc | N/A | Match Encounter file to Encounter Personnel File by encounter\_key with personnel\_type\_ref = 1119 (Attending Physician), and return encounter\_prsnl (see MDR Genesis Encounter spec). Take from first record (by enc\_prsnl\_reltn\_sk) for a given encounter\_key. |
| Primary Provider ID | $100. | provid\_prim | N/A | If provid\_enc is populated and is non-zero then set to provid\_enc. Else if provid1 is populated and is non-zero, then set to provid1. Else leave blank. |
| Primary Provider Source | $4. | prov\_prim\_source | N/A | If provid\_enc is populated and is non-zero then set to “ENC”. Else if provid1 is populated and is non-zero, then set to “APPT”. Else leave blank. |
| **Fields from the Event Attach File** |  |  |  |  |
| Referral Order Number | $100. | ref\_order\_sk | N/A | order\_sk. Merge Event Attach file to Orders file by order\_sk and filter to event attachments that match to orders with activity\_type\_ref = 23274635 (Internal Referral). Take first referral (by order\_dt\_tm) for each appointment. |
| **Fields from the MDR Genesis Personnel File** |  |  |  |  |
| Appointment Provider EDIPN | $10. | prov\_edipn1 | N/A | prsnl\_edipn (where provid1=person\_sk) |
| Appointment Provider NPI | $10. | prov\_npi1 | N/A | npi (where provid1=person\_sk) |
| Appointment Provider Primary HIPAA Taxonomy | $10. | hipaa1 | N/A | hipaa1 (where provid1=person\_sk) |
| Test Record Indicator (Appointment Provider) | 8. | test\_personnel\_flag1 | N/A | test\_record\_ind (where provid1=person\_sk) |
| Provider 2 EDIPN | $10. | prov\_edipn2 | N/A | prsnl\_edipn (where provid2=person\_sk) |
| Provider 2 NPI | $10. | prov\_npi2 | N/A | npi (where provid2=person\_sk) |
| Provider 2 Primary HIPAA Taxonomy | $10. | hipaa2 | N/A | hipaa1 (where provid2=person\_sk) |
| Test Record Indicator (Provider 2) | 8. | test\_personnel\_flag2 | N/A | test\_record\_ind (where provid2=person\_sk) |
| Provider 3 EDIPN | $10. | prov\_edipn3 | N/A | prsnl\_edipn (where provid3=person\_sk) |
| Provider 3 NPI | $10. | prov\_npi3 | N/A | npi (where provid3=person\_sk) |
| Provider 3 Primary HIPAA Taxonomy | $10. | hipaa3 | N/A | hipaa1 (where provid3=person\_sk) |
| Test Record Indicator (Provider 3) | 8. | test\_personnel\_flag3 | N/A | test\_record\_ind (where provid3=person\_sk) |
| Provider 4 EDIPN | $10. | prov\_edipn4 | N/A | prsnl\_edipn (where provid4=person\_sk) |
| Provider 4 NPI | $10. | prov\_npi4 | N/A | npi (where provid4=person\_sk) |
| Provider 4 Primary HIPAA Taxonomy | $10. | hipaa4 | N/A | hipaa1 (where provid4=person\_sk) |
| Test Record Indicator (Provider 4) | 8. | test\_personnel\_flag4 | N/A | test\_record\_ind (where provid4=person\_sk) |
| Provider 5 EDIPN | $10. | prov\_edipn5 | N/A | prsnl\_edipn (where provid5=person\_sk) |
| Provider 5 NPI | $10. | prov\_npi5 | N/A | npi (where provid5=person\_sk) |
| Provider 5 Primary HIPAA Taxonomy | $10. | hipaa5 | N/A | hipaa1 (where provid5=person\_sk) |
| Test Record Indicator (Provider 5) | 8. | test\_personnel\_flag5 | N/A | test\_record\_ind (where provid5=person\_sk) |
| Encounter Provider EDIPN | $10. | prov\_edipn\_enc | N/A | prsnl\_edipn (where provid\_enc=person\_sk) |
| Encounter Provider NPI | $10. | prov\_npi\_enc | N/A | npi (where provid\_enc=person\_sk) |
| Encounter Provider Primary HIPAA Taxonomy | $10. | hipaa\_enc | N/A | hipaa1 (where provid\_enc=person\_sk) |
| Test Record Indicator (Encounter Provider) | 8. | test\_personnel\_flag\_enc | N/A | test\_record\_ind (where provid\_enc=person\_sk) |
| Primary Provider EDIPN | $10. | prov\_edipn\_prim | N/A | prsnl\_edipn (where provid\_prim=person\_sk) |
| Primary Provider NPI | $10. | prov\_npi\_prim | N/A | npi (where provid\_prim=person\_sk) |
| Primary Provider Primary HIPAA Taxonomy | $10. | hipaa\_prim | N/A | hipaa1 (where provid\_prim=person\_sk) |
| **Fields from the Appointment Action File** |  |  |  |  |
| Check in Time | Date/Time | checkin\_dt\_tm | N/A | Retrieve action\_dt\_tm where scheduling\_action\_ref is 4519 (Check In). Take earliest check in date and time. Adjust from UTC to local time using action\_tm\_zn. |
| Check out Time | Date/Time | checkout\_dt\_tm | N/A | Retrieve action\_dt\_tm where scheduling\_action\_ref is 4520 (Check Out). Take latest check out date and time. Adjust from UTC to local time using action\_tm\_zn. |
| First Booking Action Date and Time | Date/Time | first\_book\_dt\_tm | N/A | Retrieve action\_dt\_tm where scheduling\_action\_ref is 4517 (Book). Take earliest book date and time. Adjust from UTC to local time using action\_tm\_zn.  |
| Last Booking Action Date and Time | Date/Time | last\_book\_dt\_tm | N/A | Retrieve action\_dt\_tm where scheduling\_action\_ref is 4517 (Book). Take latest book date and time. Adjust from UTC to local time using action\_tm\_zn. |
| Appointment Made Date | Date/Time | appt\_made\_dt\_tm | N/A | If last\_book\_dt\_tm is populated and is earlier than appt\_dt\_tm, set to last\_book\_dt\_tm. If last\_book\_dt\_tm is populated and is later than appt\_dt\_tm, set to appt\_dt\_tm. If last\_book\_dt\_tm is missing, set to missing. |
| **Fields from the MPI** |  |  |  |  |
| Sponsor SSN | $9. | sponssn | N/A | If a record is found in the MPI with matching EDIPN or Patient SSN, fill with the Sponsor SSN from the MPI. |
| Person Association Reason Code | $2. | parc | N/A | If a record is found in the MPI with matching EDIPN or Patient SSN, fill with the PARC for the relationship between this patient and the sponsor on that record. |
| **Fields from the LVM6** |  |  |  |  |
| Gender | $1. | gender | N/A | Fill with gender associated with this EDIPN. If not found and gender\_r = F or M, set to gender\_r. |
| Date of Birth | SAS Date | patdob | N/A | Fill with date of birth associated with this EDIPN |
| Race | $1. | race | N/A | Fill with race associated with this EDIPN. If there is no match for this patient in the LVM, set to Z. |
| Ethnic Group | $1. | ethnic | N/A | Fill with ethnicity associated with this EDIPN. . If there is no match for this patient in the LVM, set to Z. |
| Patient ZIP Code | $5. | patzip | N/A | Fill with ZIP Code if the begin date on the appointment record is between the begin and end date associated with the ZIP Code. See VM6 Specification, Exhibits G-18 and 19 for segment and field positions. |
| Marital Status | $1. | marital | N/A | Fill with Marital Status if the begin date on the appointment record is between the begin and end date associated with the Marital Status. See VM6 Specification, Exhibits G-18 and 19 for segment and field positions. |
| Beneficiary Category | $3. | bencat | N/A | Fill with Beneficiary Category if the begin date on the appointment record is between the begin and end date associated with the Beneficiary Category. If the appointment date is outside of the dates associated with the Beneficiary Category, or there is no match for this patient in the LVM, or if the LVM segment returns “Z”, set to UNK. See VM6 Specification, Exhibits G-18 and 19 for segment and field positions. |
| Common Beneficiary Category | $1. | comben | N/A | Derived from Beneficiary Category during LVM merge. See VM6 Specification, section A.1.12 for derivation. |
| Sponsor Service, Aggregate | $1. | sponsvc | N/A | Fill with Sponsor Service Aggregated if the begin date on the appointment record is between the begin and end date associated with the Sponsor Service Aggregated. If the appointment date is outside of the dates associated with the Sponsor Service, or there is no match for this patient in the LVM, set to Z. See VM6 Specification, Exhibits G-18 and 19 for segment and field positions. |
| Privilege Code | $1. | privilege | N/A | Fill with Medical Privilege Code if the begin date on the appointment record is between the begin and end date associated with the Medical Privilege Code. If the appointment date is outside of the dates associated with the Privilege Code, or there is no match for this patient in the LVM, set to 9. See VM6 Specification, Exhibits G-18 and 19 for segment and field positions. |
| Medicare Eligibility Flag | $1. | medicare\_flag | N/A | Fill with Medicare Eligibility Code if the begin date on the appointment record is between the begin and end date associated with the Medicare Eligibility Code. If the appointment date is outside of the dates associated with the Medicare Flag, or there is no match for this patient in the LVM, set to N. See VM6 Specification, Exhibits G-18 and 19 for segment and field positions. |
| ACV | $1. | acv | N/A | Fill with ACV if the begin date on the appointment record is between the begin and end date associated with the ACV. If the appointment date is before 1/1/18 and the appointment date is outside of the dates associated with the ACV, or there is no match for this patient in the LVM, set to Z. If the appointment date is on or after 1/1/18, set to blank. See VM6 Specification, Exhibit G-18 for segment and field positions. Note that the ACV will be blank filled starting in CY18. |
| ACV Group | $15. | acvgroup | N/A | Derived from ACV and comben (before 1/1/18) or enrollment group, PCM type, eligibility group, and comben (after 1/1/18). If there is no match for this patient in the LVM, set to O. See VM6 Specification, section G.3 for derivation. |
| PCM ID | $18. | pcmid | N/A | Fill with PCM ID if the begin date on the appointment record is between the begin and end dates associated with the PCM ID. See VM6 Specification, Exhibits G-18 and 19 for segment and field positions. |
| Enrollment Site | $4. | denrsite | N/A | Fill with enrollment DMIS ID, if the begin date on the appointment record is between the begin and end date associated with the enrollment DMIS ID. If the appointment date is outside of the dates associated with the enrollment site, or there is no match for this patient in the LVM, set to “NONE”. See VM6 specification, Exhibits G-18 and 19 for segment and field position.  |
| HCDP – Enrolled | $3. | hcdp | N/A | Fill with enrollment HCDP code if the begin date of the appt is between the begin and end date associated with the enrollment HCDP code. See VM6 Specification, Exhibits G-18 and 19 for segment and field positions. |
| Eligibility Group | $1. | elg\_grp | N/A | Fill with Eligibility Group if the begin date on the appointment record is between the begin and end date associated with the Eligibility Group. If the appointment date is on or after 1/1/18 and the appointment date is outside of the dates associated with the Eligibility Group, or there is no match for this patient in the LVM, set to Z. If the appointment date is before 1/1/18, set to blank. See VM6 Specification, Exhibit G-19 for segment and field positions.  |
| Enrollment Group | $1. | enr\_grp | N/A | Fill with Enrollment Group if the begin date on the appointment record is between the begin and end date associated with the Enrollment Group. If the appointment date is on or after 1/1/18 and the appointment date is outside of the dates associated with the Enrollment Group, or there is no match for this patient in the LVM, set to Z. If the appointment date is before 1/1/18, set to blank. See VM6 Specification, Exhibit G-19 for segment and field positions. |
| PCM Type | $1. | pcm\_type | N/A | Fill with Enrollment PCM Type if the begin date on the appointment record is between the begin and end date associated with the Enrollment PCM Type. If the appointment date is on or after 1/1/18 and the appointment date is outside of the dates associated with the Enrollment Group, or there is no match for this patient in the LVM, set to Z. If the appointment date is before 1/1/18, set to blank. See VM6 Specification, Exhibit G-19 for segment and field positions.  |
| HCDP - Assigned | $3. | hcdp\_assgn | N/A | Fill with assigned HCDP code if the begin date on the appointment record is between the begin and end date associated with the assigned HCDP code. See VM6 Specification, Exhibit G-19 for segment and field positions. |
| **Fields from the DMIS ID Index Table (merging by mtf)** |  |  |  |  |
| Treatment Service | $1. | txsvc | N/A | After matching on FY and mtf, set to ubu\_svc |
| Treatment Parent DMIS ID | $4. | mtf\_parent | N/A | After matching on FY and mtf, set to ubu\_par |
| Treatment T3 Region | $2. | mtf\_t3\_reg | N/A | After matching on FY and mtf, set to t3\_reg |
| Treatment T17 Region | $2. | mtf\_t17\_reg | N/A | After matching on FY and mtf, set to t17\_reg |
| Treatment Major Command | $8. | txcmnd | N/A | After matching on FY and mtf, set to majcmnd |
| Treatment MSM Area ID | $3. | txmsma | N/A | After matching on FY and mtf, set to msm\_id |
| **Fields from the DMIS ID Index Table (merging by denrsite)** |  |  |  |  |
| Enrollment Service | $1. | enrsvc | N/A | After matching on FY and denrsite, set to ubu\_svc |
| Enrollment Site Parent DMIS ID | $4. | enr\_parent | N/A | After matching on FY and denrsite, set to ubu\_par |
| Enrollment T3 Region | $2. | enr\_t3\_reg | N/A | After matching on FY and denrsite, set to t3\_reg |
| Enrollment T17 Region | $2. | enr\_t17\_reg | N/A | After matching on FY and denrsite, set to t17\_reg |
| **Fields from the Omni-CAD** |  |  |  |  |
| Catchment Area ID | $4. | catch | N/A | Based on matching FY, FM and patzip; if sponsvc = A then set equal to AWORLD, if sponsvc = F then set equal to FWORLD; if sponsvc in (M, N, V) then set equal to NWORLD, otherwise set equal to OWORLD. If zip code not found in MDR Omni-CAD, set equal to ‘0999’  |
| PRISM Area ID | $4. | prism | N/A | Based on matching FY, FM and patzip; if sponsvc = A then set equal to APRISM, if sponsvc = F then set equal to FPRISM; if sponsvc in (M, N, V) then set equal to NPRISM, otherwise set equal to OPRISM. If zip code not found in MDR Omni-CAD, set equal to ‘0999’ |
| MTF Service Area ID | $4. | mtfsvcarea | N/A | Based on matching FY, FM and patzip; if sponsvc = A then set equal to ABPA, if sponsvc = F then set equal to FBPA; if sponsvc in (M, N, V) then set equal to NBPA, otherwise set equal to OPRISM. If zip code not found in MDR Omni-CAD, set equal to ‘0999’ |
| T3 Residence Region | $2. | ben\_t3\_reg | N/A | Based on matching FY, FM and patzip; Set equal to T3\_REG. If zip code not found in MDR Omni-CAD, leave blank. |
| T17 Residence Region | $2. | ben\_t17\_reg | N/A | Based on matching FY, FM and patzip; Set equal to T17\_REG. If zip code not found in MDR Omni-CAD, leave blank. |
| **Internally Derived Fields** |  |  |  |  |
| CY | $4. | cy | N/A | CY of appointment date |
| CM | $2. | cm | N/A | CM of appointment date |
| FY | $4. | fy | N/A | FY of appointment date |
| FM | $2. | fm | N/A | FM of appointment date |
| Patient Age | 8. | patage | N/A | Age in years from date of birth (from DEERS) to appointment date. If date of birth from DEERS is not available, use dob\_r. |
| Age Group | $1. | agegrp | N/A | If Patient Age is 0-4, set to A; if 5-14, B; if 18-24, C; if 25-34, D; if 35-44, F; if 45-64, G; if 65+, H; else X. |
| Online Appointment Flag | $1. | online\_appt\_flag | N/A | If the appointment type contains the word “online” then set to 1, else set to 0. |
| Walk-In Flag | $1. | walk\_in\_flag | N/A | If appt\_type\_txt is equal to “Walk-In” then set to 1, else set to 0. |
| Appointment Prefix from Appointment Type | $9. | appt\_prefix | N/A | If appt\_type\_txt is in the format Appointment Prefix-Appointment Type-Duration (at least two hyphens) take the portion up to the first hyphen. If the Appointment Prefix contains a hyphen (e.g. MIL-REDNS)[[1]](#footnote-1), take up to the second hyphen. Else if appt\_type\_txt is in the format Appointment Prefix Appointment Type (separated by a space, and only one space) where Appointment Type = 24HR, FTR, GRP, PROC, SPEC, VIRT, then take the portion up to the space. If the Appointment Prefix contains a space (e.g. PREV MED)[[2]](#footnote-2), take up to the second space. Else, blank fill. |
| Appointment Type | $16. | appt\_type | N/A | If appt\_type\_txt is in the format Appointment Prefix-Appointment Type-Duration (at least two hyphens) take the portion between the two hyphens. If the Appointment Prefix contains a hyphen (e.g. MIL-REDNS), take the portion between the second and third hyphens. Else if appt\_type\_txt is in the format Appointment Prefix Appointment Type (separated by a space, and only one space) where Appointment Type = 24HR, FTR, GRP, PROC, SPEC, VIRT, then take the portion after the space. If the Appointment Prefix contains a space (e.g. PREV MED), take after the second space. If appt\_type\_txt is not in either of those formats, but can be easily mapped to an appointment type (e.g. Future Appointment -> Future)[[3]](#footnote-3), populate with the characters up to the word “Appointment”. Else if appt\_type\_txt = ‘Walk-In’ set to ‘Walk-In’. Else if appt\_type\_txt = ‘Dental Visit’, set to Dental. Else if appt\_type\_txt = ‘Surgery’ set to Surgery. Else if appt\_type\_txt starts with (MRI, US, MG, CT, PT, IV, LD, NM, XR, IR) set to that prefix. Else, blank fill. |
| Duration from the Appointment Type | $3. | duration\_r | N/A | If appt\_type\_txt is in the format Appointment Prefix-Appointment Type-Duration (at least two hyphens) take the portion after the second hyphen. If the Appointment Prefix contains a hyphen (e.g. MIL-REDNS), take the portion after the third hyphen. Else, blank fill. |
| Product Line from MEPRS Code | $7. | prodline | N/A | Derived based on txsvc and meprs\_cd (See Appendix A) |
| Legacy Appointment Type | $6. | appt\_type\_legacy | N/A | If appt\_type = ‘Future’, ‘Future Online’, ‘FTR’, or ‘Routine’ set to FTR, else if appt\_type = ‘Same Day’, ‘Same Day Online’, ‘24HR’, or ‘Walk-In’ set to 24HR, else if appt\_type = ‘Specialty’, ‘Specialty Online’, or ‘SPEC’ set to SPEC, else if appt\_type = ‘Group’ or ‘GRP’ set to GRP, else if appt\_type = ‘Procedure’, ‘Surgery’, or ‘PROC’ set to PROC, else if appt\_type = ‘Virtual’ or ‘VIRT’ set to VIRT, else if appt\_type = ‘Well’ set to WELL. Else set to NOMAP |
| Legacy Appointment Status | $2. | appt\_stat\_legacy | N/A | If appt\_stat = ‘Canceled’ set to 3, else if appt\_stat = ‘No Show’ set to 4, else if appt\_stat = ‘Checked Out’ or ‘Checked In’ and walk\_in = ‘1’ set to 5, else if appt\_stat = ‘Checked Out’ or ‘Checked In’ and walk\_in = ‘0’ set to 2, else if appt\_stat = ‘Confirmed’ or ‘Scheduled’ set to 12, else set to 14[[4]](#footnote-4) |
| Length of Time Until Appointment | 8.2 | days\_until | N/A | Subtract appt\_made\_dt\_tm from appt\_dt\_tm and divide by 86400 (to convert seconds to days). If either appt\_made\_dt\_tm or appt\_dt\_tm is missing, set to missing. |

1. Refresh Frequency

## Weekly

1. Data Marts

N/A.

1. Special Outputs

N/A

Appendix A: Product Line Derivation from MEPRS Code

**Table A1: Product Line Derivation**

| **Product Line** | **Full Name Description** | **Service** | **MEPRS** |
| --- | --- | --- | --- |
| PC | Primary Care | A, N, P | BGA, BHA, BDA, BAA, BJA, BHB, BHI, BDC, BDB, BKA, BHZ, BGZ, BHH, BAZ, BDZ |
| PC | Primary Care | All except A, N, P | BGA, BHA, BDA, BAA, BJA, BHB, BHI, BDC, BDB, BKA, BHZ, BGZ, BHH |
| ORTHO | Orthopedics | All | BLA, BEA, BEF, BEZ, BEB, BEE, BEC, BED, BLB |
| MH | Mental Health | All | BFD, BFE, BFF, BFA, BFB, BFC |
| OBGYN | Obstetrics/Gynecology | All | BCC, BCB, BCD, BCA |
| OPTOM | Optometry | All | BHC, BBD |
| IMSUB | Internal Medicine Subspecialty | All | BAG, BAC, BAL, BAK, BAB, BAN, BAQ, BAS, BAM, BAF, BAJ, BAO, BAH, BAE, BAU, BAT, BAV |
| ER | Emergency Room | All | BIA |
| SURG | General Surgery | All | BBA |
| SURGSUB | Surgical Subspecialty | All | BBI, BBG, BBC, BBK, BBJ, BBH, BBB, BBZ, BBE |
| ENT | Otolaryngology | All | BBF |
| DERM | Dermatology | All | BAP |
| OTHER | Other | All | All other MEPRS Codes |

1. Currently, the known appointment prefixes with a hyphen are: MIL-REDNS, ADDM-SARP, CASE-MGMT, SURG-GEN, NUTR-DIET, and HEAR-CON [↑](#footnote-ref-1)
2. Currently, the only known appointment prefix under this nomenclature with a space is: PREV MED [↑](#footnote-ref-2)
3. Currently, the known mappings like this are: Future Appointment -> Future, Specialty Appointment -> Specialty, Same Day Appointment -> Same Day, Virtual Appointment -> Virtual, Group Appointment -> Group, Future Appointment Online -> Future Online, Procedure Appointment -> Procedure, Same Day Appointment Online -> Same Day Online [↑](#footnote-ref-3)
4. Currently includes appt\_stat = ‘Hold’ and appt\_stat is blank [↑](#footnote-ref-4)