**12 August 2022**

Vitals

for the MHS Mart (M2)

(Version 2.00.05)

Future Specification

**Revision History**

| **Version** | **Date** | **Originator** | **Para/Tbl/Fig** | **Description of Change** |
| --- | --- | --- | --- | --- |
| 1.00.00 | 3/19/2013 | W. Funk | * Whole document | * Initial version |
| 1.01.00 | 4/4/2013 | K. Hutchinson for W. Funk | * Table 2 | * Modified ACV Group for ACV R and V |
| 1.01.01 | 4/12/2013 | W. Funk | * Table 1 * Table 2 | * Noted that person ID is only available in the restricted universe. * Changed the merge rule for OCO and IIW data elements to use a pseudo identifier, rather than a direct identifier. Indicated that BMI should be averaged rather than summed. Clarified lengths of numeric data elements. |
| 1.01.02 | 4/26/2013 | W. Funk | * Table 1 * Table 2 | * Replace Sponsor SSN with Sponsor ID * Replace Patient SSN with Beneficiary ID * change TOBACCO\_AMOUNT to length 20 |
| 1.01.03 | 5/30/2013 | K. Hofmann | * Table 1 * Table 2 | * Label Treatment DMIS ID as Tmt DMIS ID. * Get Enrollment Site Parent Name and Tmt Parent DMIS ID Name from merges using Enrollment Site and Tmt DMIS ID respectively. * Add date criteria to IIW merge. * Change labels for OCO objects. * Note that future specs will use pseudo person ID to match to CTS file instead of pseudo sponsor ID. |
| 1.01.04 | 7/18/2013 | W. Funk | * Table 2 | * Changed rule for OCO Deployed Data Fields |
| 1.01.05 | 1/30/2017 | W. Funk | * Table 1 * Table 2 | * Added MEPRS4 Code * Added MEPRS3 Code and Description. |
| 1.01.06 | 4/5/17 | K. Hofmann | * Table 1 | * Changed format of temperature to include the first decimal place * Added Most Recent BMI Record Flag |
| 1.01.07 | 5/25/17 | K. Hofmann | * Table 2 | * Added MEPRS4 Code Description |
| 1.01.08 | 8/21/2017 | B. Ross for W. Funk | * Table 1 * Table 2 | * Added new fields related to NDAA and region transition * Hid region fields |
| 1.01.09 | 3/26/2018 | K. Hofmann | * Table 2 | * Added header for Table 2 * Changed format for eligibility group and enrollment group * Pointed region variables to the correct MDR SAS variable names * Fixed ACV Group derivation for values of “Desig Prov” and “Overseas Remote” |
| 2.00.01 | 12/18/2018 | W. Funk | * Table 2 | * Added MHS GENESIS content |
| 2.00.02 | 3/02/2019 | T. Comer for W. Funk | * Table 2 | * Slight adjustments to variable names for MHS GENESIS content |
| 2.00.03 | 6/29/201 | W. Funk | * Table 2 | * Added more DMIS ID Hierarchy fields |
| 2.00.04 | 2/2/2022 | T. Comer | * Table 2 | * Adjusted length of eligibility and enrollment group variables from 3 to 1 |
| 2.00.05 | 8/12/2022 | T. Comer | * Table 2 | * Updated Menstrual Period, Last logic |

# Vitals Data

1. Source: The Vitals data is provided to M2 by the MDR.
2. File Format: Regardless of the length specified, all fields are variable length and delimited by “|”. A null field will simply have an end of field delimiter “|” immediately following the previous field’s end of field delimiter.
3. File Content: The M2 Vitals table will contain vital signs information from the MDR CDR Vitals file and the MDR GENESIS Vitals file.
4. Organization and Batching: Each week, two feed files are provided; a “delete file” and an “add file”. The “delete file” contains record identifiers for rows of the vitals table that are to be removed in that week’s process, while the “add file” contains records that are to be added in the week’s process. These feed files will contain both CDR Vitals and GENESIS Vitals.
5. Frequency of Processing: Refreshes are weekly, or whenever the CDR and GENESIS Vitals tables are updated in the MDR.
6. Filters: All CDR and GENESIS Vitals records are provided to M2, and no additional filters are applied.
7. Updating the Master Tables: For the initial loading of the M2 Vitals table, there will only be an “add file”. Thereafter, each week records from the “delete file” will be matched to the existing M2 Vitals table by Record ID. If a match is found in the master Vitals table, the Vitals record is deleted. After applying the delete file, records from the “add file” are simply added with field transformations as specified below performed. The order of operations is important. The delete file is always applied first, and then records are appended from the “add file.”
8. Feed Record Layout and Content. Table 1 contains the layout of the “delete” file. Table 2 contains the layout of the “add” file.

**Table 1: M2 Vitals Delete File Layout**

| **M2 Data Element** | **Format** | **SAS Name from MDR for CDR Data** | **SAS Name from MDR for GENESIS Data** | **Processing Rule/Comments** |
| --- | --- | --- | --- | --- |
| Record ID | $20 | CDR\_VITALS\_ID | ENCOUNTER\_SK | No transformation |

**Table 2: M2 Vitals Add File Layout**

| **M2 Data Element** | **Format** | **SAS Name from MDR for CDR Data** | **SAS Name from MDR for GENESIS Data** | **Processing Rule/Comments** |
| --- | --- | --- | --- | --- |
| Record ID | $20 | CDR\_VITALS\_ID | ENCOUNTER\_SK | No transformation. |
| ACV | $1 | ACV | ACV | No transformation. |
| Age Group Code | $1 | AGEGRP | AGEGRP | No transformation. |
| Alcohol Annoy | $1 | ALCOHOL\_ANNOY | TBD | No transformation. |
| Alcohol Cut Down | $1 | ALCOHOL\_CUT\_DOWN | TBD | No transformation. |
| Alcohol Eye Opener | $1 | ALCOHOL\_EYE\_OPENER | TBD | No transformation. |
| Alcohol Guilt | $1 | ALCOHOL\_GUILT | NA | No transformation. |
| Alcohol Use | $1 | ALCOHOL\_USE | ALCOHOL\_USE | No transformation. |
| Appointment Date | YYYYMMDD | APPTDT | ENC\_DT | No transformation for M2. |
| Associated CAPER Record ID | $10 | APPTIDNO | ENCOUNTER\_SK | No transformation. |
| Beneficiary Category | $3 | BENCAT | BENCAT | No transformation. |
| CDR Appointment ID | $20 | CDR\_APPT\_ID | N/A | No transformation. |
| Bencat Common | $1 | COMBEN | COMBEN | No transformation. |
| Beneficiary Zip Code | $5 | DEERSZIP | PATZIP | No transformation. |
| Enrollment SIte | $4 | DENRSITE | DENRSITE | No transformation. |
| Blood Pressure, No Position | $7 | DIASTOLIC\_BLANK; SYSTOLIC\_BLANK | DIASTOLIC\_BLANK; SYSTOLIC\_BLANK | No transformation In M2. In MDR, SYSTOLIC\_BLANK / DIASTOLIC\_BLANK |
| Blood Pressure, Sitting | $7 | DIASTOLIC\_SIT; SYSTOLIC\_SIT | DIASTOLIC\_SIT; SYSTOLIC\_SIT | No transformation in M2. In MDR, SYSTOLIC\_SIT / DIASTOLIC\_SIT |
| Blood Pressure, Standing | $7 | DIASTOLIC\_STAND; SYSTOLIC\_STAND | DIASTOLIC\_STAND; SYSTOLIC\_STAND | No transformation in M2. In MDR, SYSTOLIC\_STAND / DIASTOLIC STAND |
| Blood Pressure, Supine | $7 | DIASTOLIC\_SUPINE; SYSTOLIC\_SUPINE | DIASTOLIC\_SUPINE; SYSTOLIC\_SUPINE | No transformation in M2. In MDR, SYSTOLIC\_SUPINE / DIASTOLIC SUPINE |
| Tmt DMISID | $4 | DMISID | MTF | No transformation |
| Sponsor Service | $1 | DSPONSVC | N/A | No transformation |
| Sponsor Service, Aggregate | $1 | DSVCAGG | SPONSVC | No transformation. |
| Person ID | $10 | EDI\_PN | EDIPN | No transformation. In restricted universe only |
| Entry Date | YYYYMMDD | ENTRY\_DT | N/A | No transformation. |
| Entry Time | 8 | ENTRY\_TIME | N/A | No transformation. |
| FY | $4 | FY | FY | No transformation. |
| FM | $2 | FM | FM | No transformation. |
| Gender | $1 | GENDER | GENDER\_R | No transformation. |
| HCDP - Enrolled | $3 | HCDP | HCDP | No transformation. |
| Height | 4 | HEIGHT\_INCHES | HEIGHT\_INCHES | No transformation |
| CHCS Host | $4 | HOSTDMIS | N/A | No transformation. For M2 feed, in MDR fill GENESIS data with "GEN" |
| Oxygen Saturation | 3 | OXYGEN\_SAT | OXYGEN\_SAT | No transformation |
| Pain Scale | 2 | PAIN | PAIN\_SCORE | No transformation |
| Age | 3 | PATAGE | PATAGE | No transformation |
| Date of Birth | YYYYMMDD | PATDOB | PATDOB | No transformation |
| Beneficiary ID | $9 | PATSSN | PATSSN | No transformation. In restricted universe only. |
| Peak Flow | 8 | PEAK\_FLOW | N/A | No transformation |
| Heart Rate, No Position | 4 | RATE\_BLANK | N/A | No transformation |
| Heart Rate, Sitting | 4 | RATE\_SIT | PULSE\_SIT | No transformation |
| Heart Rate, Standing | 4 | RATE\_STAND | PULSE\_STAND | No transformation |
| Heart Rate, Supine | 4 | RATE\_SUPINE | PULSE\_SUPINE | No transformation |
| Relationship to Sponsor | $1 | RELATIONSHIP | N/A | No transformation |
| Respiratory Rate | 8 | RESPIRATORY\_RATE | RESP\_RATE | No transformation |
| Heart Rhythm, No Position | $1 | RHYTHM\_ID\_BLANK | RHYTHM\_ID\_BLANK | No transformation |
| Heart Rhythm, Sitting | $1 | RHYTHM\_ID\_SIT | N/A | No transformation |
| Heart Rhythm, Standing | $1 | RHYTHM\_ID\_STAND | N/A | No transformation |
| Heart Rhythm, Supine | $1 | RHYTHM\_ID\_SUPINE | N/A | No transformation |
| Sponsor ID | $9 | SPONSSN | SPONSSN | No transformation. In restricted universe only. |
| Temperature | 5.1 | TEMPERATURE\_F | TEMP\_ARTERY\_F | No transformation. |
| Temperature Site | $1 | TEMP\_SITE\_ID | TEMP\_SITE\_ID | No transformation. |
| Tobacco User | $1 | TOBACCO | TOBACCO | No transformation |
| Tobacco Amount Used | $20 | TOBACCO\_AMOUNT | TBD | No transformation |
| Tobacco Desire to Quit | $1 | TOBACCO\_QUIT | TBD | No transformation |
| Tobacco Type Used | $20 | TOBACCO\_TYPE | TBD | No transformation |
| Weight | 4 | WEIGHT\_LBS | WEIGHT\_LB  WEIGHT\_EST\_LB  WEIGHT\_DOSING\_LB | If WEIGHT\_LB is populated, use WEIGHT\_LB. Else if WEIGHT\_EST\_LB is populated, fill with WEIGHT\_EST\_LB. Else if WEIGHT\_DOSING\_LB is populated, fill field with WEIGHT\_DOSING\_LB. Else leave blank. |
| MEPRS4 Code | $4 | MEPRSCD | MEPRSCD | No transformation |
| Most Recent BMI Record Flag | $1 | RECENT\_BMI | RECENT\_BMI | No transformation |
| Eligibility Group | $1 | ELG\_GRP | ELG\_GRP | No transformation |
| Enrollment Group | $1 | ENR\_GRP | ENR\_GRP | No transformation |
| Enrollment PCM Type | $1 | PCM\_TYPE | PCM\_TYPE | No transformation |
| HCDP - Assigned | $3 | HCDP\_ASSGN | HCDP\_ASSGN | No transformation |
| Beneficiary T3 Region | $2 | BEN\_REG\_T3 | BEN\_T3\_REG | No transformation |
| Beneficiary T2017 Region | $2 | BEN\_REG\_T17 | BEN\_T17\_REG | No transformation |
| Enrollment Site T3 Region | $2 | ENR\_REG\_T3 | ENR\_T3\_REG | No transformation |
| Enrollment Site T2017 Region | $2 | ENR\_REG\_T17 | ENR\_T17\_REG | No transformation |
| Tmt DMIS ID T3 Region | $2 | MTF\_REG\_T3 | mtf\_t3\_reg | No transformation |
| Tmt DMIS ID T2017 Region | $2 | MTF\_REG\_T17 | mtf\_t17\_reg | No transformation |
| ACV Group | $15 | ACVGROUP | ACVGROUP | No transformation in M2. In MDR, when preparing the M2 feed, map PR to Prime; DP to Designated Provider, OP to Overseas Remote, PL to Plus, O to Other and R to Reliant. |
| Tympanic Temperature (degrees Fahrenheit) | 5.1 | N/A | TEMP\_TYMPANIC\_F | No transformation |
| Primary Pain Location | $80 | N/A | PAIN\_LOC | No transformation |
| Corrective Lenses | $80 | N/A | CORR\_LENSES | No transformation |
| Heart Rate Monitored | $3 | N/A | HEART\_RATE\_MON | No transformation |
| Eye, Right Visual Acuity | $6 | N/A | VIS\_ACUITY\_R | No transformation |
| Eye, Left Visual Acuity | $6 | N/A | VIS\_ACUITY\_L | No transformation |
| Menstrual Period, Last | $8 | N/A | MENS\_LAST | If data cannot be put into date format (MM/DD/YY), then make field blank. |
| Menstrual Status | $20 | N/A | MENS\_STAT | No transformation |
| MHS GENESIS Flag | $1 | N/A | N/A | In M2, value will be Y or N. In data from the MDR GENESIS will have a value of 1 and other non-GENESIS records will have a value of 0. |
| Financial Indicator Number (FIN) | $40 | N/A | FINANCIAL\_NBR | No transformation |
| Encounter Type | $40 | N/A | ENCOUNTER\_TYPE | No transformation |
| Medical Record Number | $40 | N/A | MRN | No transformation |

1. Appended Fields: The M2 has many data fields that are viewed in the M2 either by joining to another table, or through data element additions made during loading of the data. Table 2 describes these elements and the rules to create them.

**Table 3: Appended/Inferred data elements visible in M2 but not in the data feed from the MDR**

| **Data Element** | **Transformation** |
| --- | --- |
| Beneficiary First Name | Join to MPI table by Person ID. |
| Beneficiary Last Name | Join to MPI table by Person ID. |
| Beneficiary Name | Last Name, First Name (e.g., DOE, JOHN). |
| Beneficiary Region | HIDE See M2 Omni-CAD specification for business rules. |
| Beneficiary HSSC Region | HIDE See M2 Omni-CAD specification for business rules. |
| Body Mass Index | (Weight/ (Height\*Height))\*703. Set aggregation rule to average rather than sum |
| Catchment Area ID | See M2 Omni-CAD specification for business rules. |
| Catchment Area Name | See M2 DMIS ID Index specification for business rules. |
| Catchment Area Command | See M2 DMIS ID Index specification for business rules. |
| Catchment Area Military Service | See M2 DMIS ID Index specification for business rules. |
| Catchment Area MSMA | See M2 DMIS ID Index specification for business rules. |
| Catchment Area Readiness CMD | See M2 DMIS ID Index specification for business rules. |
| Catchment Area Readiness Service | See M2 DMIS ID Index specification for business rules. |
| Catchment Area Base Market Code | See M2 DMIS ID Index specification for business rules. |
| Catchment Area Expanded Market Code | See M2 DMIS ID Index specification for business rules. |
| Catchment Area Market Name | See M2 DMIS ID Index specification for business rules. |
| Catchment Area Reporting Market Code | See M2 DMIS ID Index specification for business rules |
| Catchment Area Reporting Market Name | See M2 DMIS ID Index specification for business rules |
| Catchment Area Type of Market Code | See M2 DMIS ID Index specification for business rules |
| Catchment Area Type of Market Name | See M2 DMIS ID Index specification for business rules |
| Enrollment Site Name | See M2 DMIS ID Index specification for business rules |
| Enrollment Site Command | See M2 DMIS ID Index specification for business rules |
| Enrollment Site DHP Code | See M2 DMIS specification for business rules. |
| Enrollment Site Financial Parent | See M2 DMIS ID Index specification for business rules |
| Enrollment Site Financial Parent Name | See M2 DMIS ID Index specification for business rules |
| Enrollment Site Military Service | See M2 DMIS ID Index specification for business rules |
| Enrollment Site Region | HIDE See M2 DMIS ID Index specification for business rules. |
| Enrollment Site MSMA | See M2 DMIS ID index specification for business rules. |
| Enrollment Site Parent | See M2 DMIS ID index specification for business rules |
| Enrollment Site Parent Name | See M2 DMIS ID index specification for business rules |
| Enrollment Site Readiness CMD | See M2 DMIS ID Index specification for business rules. |
| Enrollment Site Readiness Service | See M2 DMIS ID Index specification for business rules. |
| Enrollment Site Readiness Parent | See M2 DMIS ID Index specification for business rules. |
| Enrollment Site Base Market Code | See M2 DMIS ID Index specification for business rules. |
| Enrollment Site Expanded Market Code | See M2 DMIS ID Index specification for business rules. |
| Enrollment Site Market Name | See M2 DMIS ID Index specification for business rules. |
| Enrollment Site Reporting Market Code | See M2 DMIS ID Index specification for business rules |
| Enrollment Site Reporting Market Name | See M2 DMIS ID Index specification for business rules |
| Enrollment Site Type of Market Code | See M2 DMIS ID Index specification for business rules |
| Enrollment Site Type of Market Name | See M2 DMIS ID Index specification for business rules |
| Enrollment Site HSSC Region | HIDE See M2 DMIS ID specification for business rules. |
| IIW Flag | See M2 IIW specification for business rules. |
| Market Area ID | See M2 Omni-CAD specification for business rules. |
| MEPRS3 Code | 1st 3 characters of MEPRS4 Code |
| MEPRS3 Code Description | Join to MEPRS 3 Code Reference table by FY and MEPRS3 Code. |
| MEPRS4 Code Description | Join to MEPRS 4 Code Reference table by FY, Tmt DMIS ID and MEPRS4 Code. |
| MTF Service Area | See M2 Omni-CAD specification for business rules. |
| MTF Service Area Name | See M2 DMIS ID specification for business rules. |
| MTF Service Area Base Market Code | See M2 DMIS ID specification for business rules. |
| MTF Service Area Expanded Market Code | See M2 DMIS ID specification for business rules. |
| MTF Service Area Reporting Market Code | See M2 DMIS ID specification for business rules. |
| MTF Service Area Type of Market Code | See M2 DMIS ID specification for business rules. |
| Number of Records | Set to 1 for all records. |
| Prime Service Area | See M2 Omni-CAD specification for business rules. |
| PRISM Area ID | See M2 Omni-CAD specification for business rules. |
| PRISM Area Name | See M2 DMIS specification for business rules. |
| PRISM Area Command | See M2 DMIS specification for business rules. |
| PRISM Area Military Service | See M2 DMIS specification for business rules. |
| PRISM Area MSMA | See M2 DMIS specification for business rules. Populated FY04+. |
| PRISM Area Readiness CMD | See M2 DMIS ID Index specification for business rules. |
| PRISM Area Readiness Service | See M2 DMIS ID Index specification for business rules. |
| PRISM Area Base Market Code | See M2 DMIS ID Index specification for business rules. |
| PRISM Area Expanded Market Code | See M2 DMIS ID Index specification for business rules. |
| PRISM Area Market Name | See M2 DMIS ID Index specification for business rules. |
| PRISM Area Reporting Market Code | See M2 DMIS ID Index specification for business rules |
| PRISM Area Reporting Market Name | See M2 DMIS ID Index specification for business rules |
| PRISM Area Type of Market Code | See M2 DMIS ID Index specification for business rules |
| PRISM Area Type of Market Name | See M2 DMIS ID Index specification for business rules |
| Pseudo Person ID | Encryption algorithm applied to Person ID |
| Pseudo Sponsor ID | Encryption algorithm applied to Sponsor ID. |
| Reservist Status Code | See M2 Reservist specification for business rules. |
| Special Operations Code | See M2 Reservist specification for business rules. |
| Tmt DMIS ID Name | See M2 DMIS ID specification for business rules. |
| Tmt DMIS ID Command | See M2 DMIS ID specification for business rules. |
| Tmt DMIS ID DHP Code | See M2 DMIS ID specification for business rules. |
| Tmt DMIS ID HSSC Region | HIDE See M2 DMIS ID specification for business rules. |
| Tmt DMIS ID Military Service | See M2 DMIS ID Index specification for business rules. |
| Tmt DMIS ID MSMA | See M2 DMIS ID Index specification for business rules. |
| Tmt DMIS ID Financial Parent | See M2 DMIS ID Index specification for business rules. |
| Tmt DMIS ID Financial Parent Name | See M2 DMIS ID Index specification for business rules. |
| Tmt DMIS ID Parent | See M2 DMIS ID Index specification for business rules. |
| Tmt DMIS ID Parent Name | See M2 DMIS ID Index specification for business rules. |
| Tmt DMIS ID Readiness CMD | See M2 DMIS ID Index specification for business rules. |
| Tmt DMIS ID Readiness Service | See M2 DMIS ID Index specification for business rules. |
| Tmt DMIS ID Base Market Code | See M2 DMIS ID Index specification for business rules. |
| Tmt DMIS ID Expanded Market Code | See M2 DMIS ID Index specification for business rules. |
| Tmt DMIS ID Market Name | See M2 DMIS ID Index specification for business rules. |
| Tmt DMIS ID Reporting Market Code | See M2 DMIS ID Index specification for business rules |
| Tmt DMIS ID Reporting Market Name | See M2 DMIS ID Index specification for business rules |
| Tmt DMIS ID Type of Market Code | See M2 DMIS ID Index specification for business rules |
| Tmt DMIS ID Type of Market Name | See M2 DMIS ID Index specification for business rules |
| Tmt DMIS ID HSSC Region | HIDE See M2 DMIS ID Index specification for business rules. |
| Tmt DMIS ID Region (HIDE) | HIDE See M2 DMIS ID Index specification for business rules. |
| TPR Flag | See M2 Omni-CAD specification for business rules. |
| Ever Deployed Flag (OCO) | See M2 CTS specification for business rules. |
| Days Since Most Recent OCO Depl | See M2 CTS specification for business rules. This is a measure |
| Days Since Return from OCO Depl | See M2 CTS specification for business rules. This is a dimension |
| Cumulative OCO Deployed Days | See M2 CTS specification for business rules. |
| OCO Deployed Flag | See M2 CTS specification for business rules. |

1. Quality Review

* Record counts should match those contained in the transmittal letter representing each feed
* After applying the update files, the record counts in the M2 Vitals table should match the record counts in the MDR Vitals table.
* The first and last 10 records in the files should be visually inspected to ensure proper formatting after loading
* The number of records should always be >0

1. File Location

Health Care Services / Direct Care / CDR Vitals

1. Special Outputs: N/A