**21 August 2017**

Clinical Data Repository (CDR) Vitals

for the MHS Mart (M2)

(Version 1.01.08)

Current 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 Patient SSN with Beneficiary ID * Replace Sponsor SSN with Sponsor 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 |

# Clinical Data Repository Vitals Data

1. Source: The CDR 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 CDR Vitals table will contain all vital signs information captured in the Vitals Module in AHLTA from FY 2009 and later.
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.
5. Frequency of Processing: Refreshes are weekly, or whenever the MDR Vitals table is updated.
6. Filters: All CDR VItals records are provided to M2, and no additional filters are applied.
7. Updating the Master Tables: For the initial loading of the M2 CDR 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 CDR Vitals table, the CDR 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 1: M2 CDR Vitals Delete File Layout**

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

| **M2 Data Element** | **Format** | **SAS Name from MDR** | **Processing Rule/Comments** |
| --- | --- | --- | --- |
| Record ID | $20 | CDR\_VITALS\_ID | No transformation. |
| ACV | $1 | ACV | No transformation. |
| Age Group Code | $1 | AGEGRP | No transformation. |
| Alcohol Annoy | $1 | ALCOHOL\_ANNOY | No transformation. |
| Alcohol Cut Down | $1 | ALCOHOL\_CUT\_DOWN | No transformation. |
| Alcohol Eye Opener | $1 | ALCOHOL\_EYE\_OPENER | No transformation. |
| Alcohol Guilt | $1 | ALCOHOL\_GUILT | No transformation. |
| Alcohol Use | $1 | ALCOHOL\_USE | No transformation. |
| Appointment Date | YYYYMMDD | APPTDT | No transformation. |
| Associated CAPER Record ID | $10 | APPTIDNO | No transformation. |
| Beneficiary Category | $3 | BENCAT | No transformation. |
| CDR Appointment ID | $20 | CDR\_APPT\_ID | No transformation. |
| Bencat Common | $1 | COMBEN | No transformation. |
| Beneficiary Zip Code | $5 | DEERSZIP | No transformation. |
| Enrollment SIte | $4 | DENRSITE | No transformation. |
| Blood Pressure, No Position | $7 | DIASTOLIC\_BLANK; SYSTOLIC\_BLANK | No transformation In M2. In MDR, SYSTOLIC\_BLANK / DIASTOLIC\_BLANK |
| Blood Pressure, Sitting | $7 | DIASTOLIC\_SIT; SYSTOLIC\_SIT | No transformation in M2. In MDR, SYSTOLIC\_SIT / DIASTOLIC\_SIT |
| Blood Pressure, Standing | $7 | DIASTOLIC\_STAND; SYSTOLIC\_STAND | No transformation in M2. In MDR, SYSTOLIC\_STAND / DIASTOLIC STAND |
| Blood Pressure, Supine | $7 | DIASTOLIC\_SUPINE; SYSTOLIC\_SUPINE | No transformation in M2. In MDR, SYSTOLIC\_SUPINE / DIASTOLIC SUPINE |
| Tmt DMISID | $4 | DMISID | No transformation |
| Sponsor Service | $1 | DSPONSVC | No transformation |
| Sponsor Service, Aggregate | $1 | DSVCAGG | No transformation. |
| Person ID | $10 | EDI\_PN | No transformation. In restricted universe only |
| Entry Date | YYYYMMDD | ENTRY\_DT | No transformation. |
| Entry Time | 8 | ENTRY\_TIME | No transformation. |
| FY | $4 | FY | No transformation. |
| FM | $2 | FM | No transformation. |
| Gender | $1 | GENDER | No transformation. |
| HCDP - Enrolled | $3 | HCDP | No transformation. |
| Height | 4 | HEIGHT\_INCHES | No transformation |
| CHCS Host | $4 | HOSTDMIS | No transformation |
| Oxygen Saturation | 3 | OXYGEN\_SAT | No transformation |
| Pain Scale | 2 | PAIN | No transformation |
| Age | 3 | PATAGE | No transformation |
| Date of Birth | YYYYMMDD | PATDOB | No transformation |
| Beneficiary ID | $9 | PATSSN | No transformation. In restricted universe only. |
| Peak Flow | 8 | PEAK\_FLOW | No transformation |
| Heart Rate, No Position | 4 | RATE\_BLANK | No transformation |
| Heart Rate, Sitting | 4 | RATE\_SIT | No transformation |
| Heart Rate, Standing | 4 | RATE\_STAND | No transformation |
| Heart Rate, Supine | 4 | RATE\_SUPINE | No transformation |
| Relationship to Sponsor | $1 | RELATIONSHIP | No transformation |
| Respiratory Rate | 8 | RESPIRATORY\_RATE | No transformation |
| Heart Rhythm, No Position | $1 | RHYTHM\_ID\_BLANK | No transformation |
| Heart Rhythm, Sitting | $1 | RHYTHM\_ID\_SIT | No transformation |
| Heart Rhythm, Standing | $1 | RHYTHM\_ID\_STAND | No transformation |
| Heart Rhythm, Supine | $1 | RHYTHM\_ID\_SUPINE | No transformation |
| Sponsor ID | $9 | SPONSSN | No transformation. In restricted universe only. |
| Temperature | 5.1 | TEMPERATURE\_F | No transformation. |
| Temperature Site | $1 | TEMP\_SITE\_ID | No transformation. |
| Tobacco User | $1 | TOBACCO | No transformation |
| Tobacco Amount Used | $20 | TOBACCO\_AMOUNT | No transformation |
| Tobacco Desire to Quit | $1 | TOBACCO\_QUIT | No transformation |
| Tobacco Type Used | $20 | TOBACCO\_TYPE | No transformation |
| Weight | 4 | WEIGHT\_LBS | No transformation |
| MEPRS4 Code | $4 | MEPRSCD | No transformation |
| Most Recent BMI Record Flag | $1 | RECENT\_BMI | No transformation |
| Eligibility Group | $3 | elg\_grp | No transformation |
| Enrollment Group | $3 | enr\_grp | No transformation |
| Enrollment PCM Type | $1 | pcm\_type | No transformation |
| HCDP - Assigned | $3 | hcdp\_assgn | No transformation |
| Beneficiary T3 Region | $2 | ben\_reg\_t3 | No transformation |
| Beneficiary T2017 Region | $2 | ben\_reg\_t17 | No transformation |
| Enrollment Site T3 Region | $2 | enr\_reg\_t3 | No transformation |
| Enrollment Site T2017 Region | $2 | enr\_reg\_t17 | No transformation |
| Tmt DMIS ID T3 Region | $2 | mtf\_reg\_t3 | No transformation |
| Tmt DMIS ID T2017 Region | $2 | mtf\_reg\_t17 | No transformation |
| ACV Group | $15 | acvgroup | No transformation in M2. In MDR, when preparing the M2 feed map  “PR” to “Prime”  “DP” to “Designated Provider”  “OP” to “Overseas Prime”  “PL” to “Plus”  “O” to “Other”  “R” to “Reliant” |

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

| **M2 Data Element** | **Processing Rule/Comments** |
| --- | --- |
| ACV Group | If ACV in (A, E, H or J) then set to “Prime”, else if ACV in (B, F) then set to “Overseas Remote”, else if ACV in (G, L) then set to “Plus”, else if ACV is U then set to “Desig Prov”, else if ACV in (R, V) then set to “Other”, else if ACV in (M, Q) then set to “Reliant”, else if Bencat Common = 4 then set to “Reliant”, else set to “Other”. |
| Reservist Status Code | Join based on pseudo sponsor ID and entry date from Vitals data between begin and end dates of reservist status in Reservist Table. If no match found, leave blank. See Reservist Specification for more information. |
| Special Operations Code |
| MTF Service Area | Aggregate the sponsor service in the Vitals data so that A: Army, F: Air Force, N: Navy/Marines (includes Afloat) and O: Others. Then match Vitals data (Beneficiary zip code, FY/FM and the just-aggregated sponsor service) to the Market Table (zip code, FY/FM and service) to retrieve the required data element. If no match found, leave blank. See Market Table specification for more information. |
| PRISM Area ID |
| Catchment Area ID |
| Market Area ID | Match vitals data by beneficiary zip code, FY and FM to the Market Table by zip code, FY and FM where the service is O to retrieve the required data element. If no match found, leave blank. See Market Table specification for more information. |
| Prime Service Area |
| TPR Flag |
| Beneficiary HSSC Region | HIDE See M2 Omni-CAD specification for business rules. |
| Beneficiary Region | HIDE See M2 Omni-CAD specification for business rules. |
| Tmt DMIS ID Name | Match Vitals data by Tmt DMISID and FY to the DMIS ID Index table (DMISID, FY) to retrieve the required data element. If no match found, leave blank. See DMIS ID specification for more information. |
| Tmt DMIS ID Command |
| Tmt DMIS ID DHP Code |
| Tmt DMIS ID HSSC Region | HIDE See M2 DMIS ID Index specification for business rules. |
| Tmt DMIS ID Military Service | Match Vitals data by Tmt DMISID and FY to the DMIS ID Index table (DMISID, FY) to retrieve the required data element. If no match found, leave blank. See DMIS ID specification for more information. |
| Tmt DMIS ID MSMA |
| Tmt DMIS ID Region | HIDE See M2 DMIS ID Index specification for business rules. |
| Tmt Parent DMIS ID | Match Vitals data by Tmt DMISID and FY to the DMIS ID Index table (DMISID, FY) to retrieve the required data element. If no match found, leave blank. See DMIS ID specification for more information. |
| Tmt Parent DMIS ID Name |
| Enrollment Site Name | Match Vitals data by enrollment site and FY to the DMIS ID Index table (DMISID, FY) to retrieve the required data element. If no match found, leave blank. See DMIS ID specification for more information. |
| Enrollment Site Command |
| Enrollment Site DHP Code |
| Enrollment Site HSSC Region | HIDE See M2 DMIS ID Index specification for business rules. |
| Enrollment Site Military Service | Match Vitals data by enrollment site and FY to the DMIS ID Index table (DMISID, FY) to retrieve the required data element. If no match found, leave blank. See DMIS ID specification for more information. |
| Enrollment Site MSMA |
| Enrollment Site Region | HIDE See M2 DMIS ID Index specification for business rules. |
| Enrollment Site Parent | Match Vitals data by MTF Service Area and FY to the DMIS ID Index table (DMISID, FY) to retrieve the required data element. If no match found, leave blank. See DMIS ID specification for more information. |
| Enrollment Site Parent Name |
| MTF Service Area Name |
| Catchment Area Name | Match vitals data by Catchment Area ID and FY to the DMIS ID Index table (DMISID, FY) to retrieve the required data element. If no match found, leave blank. See DMIS ID specification for more information. |
| Catchment Area Command |
| Catchment Area Military Service |
| Catchment Area MSMA |
| PRISM Area Name | Match vitals data by PRISM Area ID and FY to the DMIS ID Index table (DMISID, FY) to retrieve the required data element. If no match found, leave blank. See DMIS ID specification for more information. |
| PRISM Area Command |
| PRISM Area Military Service |
| PRISM Area MSMA |
| Pseudo Sponsor ID | Confidential algorithm to encrypt sponsor SSN. Must be consistent with all other M2 tables. |
| Pseudo Person ID | Confidential algorithm to encrypt Person ID. Must be consistent with all other M2 tables. |
| Number of Records | Count of rows retrieved in a query |
| Ever Deployed Flag (OCO) | Match to CTS by pseudo person ID if the entry date is between the CTS begin and end dates. If no match, set to N, else set to Y. |
| Days Since Most Recent OCO Depl (Dimension) | Match to CTS by pseudo person ID if the entry date is between the CTS begin and end dates. If Deployment Record Flag = ’D’ then set to 0.  If Deployment Record Flag = “B” set to entry date – CTS begin date. If no matching record set to 0. |
| Days Since Return from OCO Depl (Measure) | Match to CTS by pseudo person ID if the entry date is between the CTS begin and end dates. If Deployment Record Flag = ’D’ then set to 0.  If Deployment Record Flag = “B” set to entry date – CTS begin date. If no matching record set to 0. |
| Cumulative OCO Days Deployed | Match to CTS by pseudo person ID if the entry date is between the CTS begin and end dates. If Deployment Record Flag = ”D” and Cumulative OCO Deployed Days is null then set to entry date – CTS Begin Date;  Else if Deployment Record Flag = “D” then set to Cumulative OCO Days Deployed + (entry Date – CTS Begin Date);  Else if Deployment Record Flag = “B” then set to Cumulative OCO Days Deployed;  If no matching record, set to null. |
| OCO Deployed Flag | Match to CTS by pseudo person ID if the entry date is between the CTS begin and end dates. If Deployment Record Flag = “D”, set to ‘Y’; else (including if no matching record) set to ‘N’. |
| IIW Flag | Match to IIW table based on pseudo person ID and entry date >- IIW.early IIW date. If a match is found set to “Y”, else set to “N”. |
| Beneficiary First Name | Match to Master Person Index based on person ID to retrieve the required element. Only visible in restricted universe. |
| Beneficiary Last Name |
| Beneficiary Name |
| Body Mass Index | (Weight/ (Height\*Height))\*703. Set aggregation rule to average rather than sum. |
| MEPRS3 Code | 1st three characters of the MEPRS4 Code |
| MEPRS3 Code Description | Match to MEPRS3 code table and retrieve MEPRS3 Code Description. |
| MEPRS4 Code Description | Match to MEPRS4 code table by FY, Tmt DMIS ID, and MEPRS4 Code and retrieve MEPRS4 Code Description. |

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