**22 January 2015**

Dental Readiness File (DRF)

for the

MHS Data Repository (MDR)

(Version 1.01.02)

Future Specification

**Revision History**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Version** | **Date** | **Originator** | **Para/Tbl/Fig** | **Description of Change** |
| 1.00.00 | 07/11/201 | C. Kangas/W.Funk | * Whole Document | * Initial version |
| 1.01.00 | 05/21/2013 | A. Hong | * Section II, III, IV, VI, VII, VIII | * Updated: * II: source data * III: timing of processing * IV: added FY and FM * VI: based on EDIPN * VII: removed merge to MPI, pulling EDIPN directly from VM6 * VIII: added fields |
| 1.01.01 | 06/10/2013 | D. McDonald | * Table 4 | * Update Business Rule for acv\_group |
| 1.01.02 | 01/22/2014 | A. Hong | * Table 4 * Section VII | * Add the way the DRC is applied * Updated wording for date used in DEERs merge |

**Dental Readiness File (DRF) for the MDR**

1. Background:

The Dental Readiness File (DRF) describes the dental readiness class (DRC) of all Active Duty Service Members (ADSM) and Guard/Reserve members. The Dental readiness classification is a simple descriptor for a patient’s overall oral health. It is a cumulative figure representing all the patient’s dental diagnoses and procedures. The dental classification is updated through treatment that has been performed or by a Type 2 examination during an open encounter.

Dental readiness classes range from 1–4:

**Class 1:** Patient that does not require dental treatment or re-evaluation within a 12 month period.

**Class 2:** Patient with an oral condition that has the potential but is not expected to result in dental emergencies within a 12 month period.

**Class 3:** Patient with an oral condition that, if not treated, is expected to result in dental emergencies within the next 12 months.

**Class 4:** Patient who requires a dental examination and whose dental classification is unknown.

1. Source:

The DRF is built from DEERS, and dental claims and encounter files produced from several other MDR processors: the Active Duty Dental Program (ADDP) and the Direct Care Dental Encounter Data (DED). The Navy uses a separate dental system that does not capture data to support inclusion in the MDR DED file, and therefore a separate Navy feed is also incorporated into the DRF.

Source Data: The datasets produced from other MDR processors required by the DRF are located at:

**Table 1: MDR DRF Processor Input Sources**

|  |  |  |
| --- | --- | --- |
| **MDR Source File** | **File Naming Convention** | **Member Name** |
| ADDP File | /mdr/pub/dental/addp/claims/ | fy\*\*.sas7bdat |
| DED File | /mdr/pub/dental/ded/ | fy\*\*.sas7bdat |
| Navy Exam File | /mdr/raw/navy/exams/ | exams.sas7bdat |
| DEERS VM-6 | Most recently available VM6BEN is used | N/A |

1. Transmission (Format and Frequency):

The datasets produced by MDR processors required as inputs to the DRF become available the 25th calendar day of each month. The DRF is then processed by the 28th day of the month.

1. Organization and Batching

Output Products: The MDR DRF processor produces the file described in table 2 by FY and FM. The preparation of the file is described in subsequent sections of this document.

**Table 2: MDR DRF Processor Output Product**

|  |  |  |
| --- | --- | --- |
| **MDR File** | **File Naming Convention** | **Member Name** |
| DRF SAS Dataset | /mdr/pub/dental/drf/fyXX/fmXX/fyXX.sas7bdat | drf.sas7bdat |

Archival of files is also required, so that corresponding “apub” and other files (i.e., log, aprod, etc) are also loaded into the MDR according to routine operating procedures.

1. Receiving Filters

The DEERS VM6 data is filtered to only include primary, eligible records for beneficiaries with beneficiary category of ACT, GRD or IGR. No other filters are applied to any of the other source data.

1. Update Process

The DRF file is updated on a monthly basis. Each monthly file preparation is a full-file refresh. The DRF will contain a record for all ADSM and Guard/Reserve, regardless of whether readiness information is available. The file is prepared by reading in the most recently available DEERS VM6 file and merging in information (based on EDIPN) from the 3 sources in Table 1 according to the business rules described in section VII and Section VIII. When merging records, keep all records that have a matching VM6 EDIPN (after applying the appropriate filters noted in Section V) or all records with a recorded readiness assessment (i.e. if an EDIPN exists only in the ADDP data but not in DEERS, retain the record).

1. Field Transformations and Deletions for MDR Database

There are several merges required to prepare the MDR DRF File. An asterisk after the merge file name indicates that existing MDR processing utilities should be used.

**Table 3: External Reference File Merges**

| **Merge** | **Date Matching** | **Additional Matching** |
| --- | --- | --- |
| DEERS LVM4\* | DRC Date\* with Segment Dates | EDIPN |
| Omni-CAD\* | FY/FM of DRC date with FY/FM of MDR Omni CAD format file | Patient zip code and Sponsor Service (Service: A=Army, F=Air Force, N=Navy and Navy Afloat, O=Other). |

* For DEERS LVM Merge, use the DRC Date if one is available. If a DRC date is not available from the dental workload data, then use the date of processing date.

1. Record Layout and Content

The table below describes the content of the MDR DRF File, which is stored as a SAS dataset. The dataset contains a snapshot of the most currently available dental readiness information for all ADSM and Guard/Reserve members.

**Table 4: MDR DRF SAS Dataset Structure and Business Rules**

| **Data Element** | **SAS Name** | **Format** | **Input position from DEERS** | **Input Position in DED** | **Input position in DENCAS Navy Exams** | **ADDP SAS Name** | **Business Rule** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Beneficiary SSN, Raw | sponssn | $9 | 24 | sponssn | patssn | patssn | No transformation  Use SPONSSN from DEERS, if SPONSSN is null then use the SPONSSN from the dental workload record that is retained. |
| DEERS Person ID | edipn | $10 | 495 | edipn | edipn | edipn | No transformation |
| CM | cm | $2 | From File Name | N/A | N/A | N/A | No transformation. If no DEERS record available, set to CY of processing month. |
| CY | cy | $4 | From File Name | N/A | N/A | N/A | No transformation. If no DEERS record available, set to CM of processing month. |
| FM | fm | $2 | From File Name | N/A | N/A | N/A | No transformation. If no DEERS record available, set to FY of processing month. |
| FY | fy | $4 | From File Name | N/A | N/A | N/A | No transformation. If no DEERS record available, set to FM of processing month. |
| Assigned Unit Identication Code (UIC) | assgn\_uic | $8 | 124 | N/A | N/A | N/A | No transformation. |
| Attached Unit Identification Code | attch\_uic | $8 | 116 | N/A | N/A | N/A | No transformation. |
| Provider Zipcode | provzip | $5 | N/A | faczip | N/A | provzip | No transformation |
| **Internally Derived Fields** | | | | | | | |
| Dental Readiness Classification | drc | $1 | N/A | drc | class | Dentalclass | First, set to most recently reported DRC among CDA, DENCAS or ADDP. If no DRC exists, set to 4.  Then, for Active Duty (if BENCAT\_DENTAL is ‘ACT’ or ‘’), if the DRC Date is greater than 14 months from the processing date, set the DRC to 4.  Then, for Guard and Reserve (if BENCAT\_DENTAL is ‘GRD’ or ‘IGR’, if the DRC Date is greater than 15 months from the processing date, set the DRC to 4. |
| DRC Date | drcdate | YYYYMMDD | N/A | encdate | d\_classdt | enddate | Fill with date associated with the source used to determine the DRC. |
| DRC Source | source | $1 | N/A | N/A | N/A | N/A | Fill with the following to represent the source from which the DRC was obtained: C: CDA, A: ADDP; D: DENCAS |
| National Provider ID | npi | $14 | N/A | npi | N/A | npi | No transformation |
| Dental Treatment Facility | dtf | $4 | N/A | dmisid | N/A | dtf\_dmisid | No transformation |
| Date of Last Exam | lastexam | YYYYYMMDD | N/A | lastexam | d\_lastexam | lastexam | Compare most recently reported "date of last exam" from CDA, and ADDP where CDT code is D0120, D0140, D0150, D0180. Keep all records from the DENCAS feed until a new feed is received. Fill with the most recent date. |
| Date of Last Exam Source | lastexam\_src | $1 | N/A | N/A | N/A | N/A | Fill with the following to represent the source from which the last exam date was obtained. C: CDA, A: ADDP; D: DENCAS |
| MDR Processing Date | procdate | $8 | N/A | N/A | N/A | N/A | Fill with date of processing: yyyymmdd |
| Alternative Care Value Group | acv\_group | $1 | N/A | N/A | N/A | N/A | If ACV is A, E, H or J set to 1; else if ACV is B or F set to 2; else if ACV is G or L set to 3, else if ACV is U then set to 4; else if ACV is R or V set to 6; else if ACV=M then set to 5; else if bencat common is 4 set to 5; else set to 6. |
| Age | patage | 3 | N/A | N/A | N/A | N/A | Patient’s age is calculated from date of birth and DRC date. If DRC date is not available, use the date of processing date. |
| Age Group | agegrp | $1 | N/A | N/A | N/A | N/A | A: ages 0-4; B: ages 5-14, C: ages 15-17, D: ages 18-24, E: 25-34, F: 35-44, G: 45-64, H: 65+, X: All others |
| **From DEERS LVM** | | | | | | | |
| Alternative Care Value | acv | $1 | N/A | N/A | N/A | N/A | No transformation |
| Beneficiary Category | bencat | $3 | N/A | N/A | N/A | N/A | No transformation |
| Ben Cat Common | comben | $1 | N/A | N/A | N/A | N/A | No transformation |
| DEERS Zip Code | deerszip | $5 | N/A | N/A | N/A | N/A | No transformation |
| DEERS Sponsor Service | dsponsvc | $1 | N/A | N/A | N/A | N/A | No transformation |
| DEERS Sponsor Service Aggregate | dsvcagg | $1 | N/A | N/A | N/A | N/A | No transformation |
| Most Recently Reported Eligible Date | elg\_fyfm | $4 | N/A | N/A | N/A | N/A | Derive from privilege code |
| Date Of Birth | patdob | YYYYMMDD | N/A | N/A | N/A | N/A | No transformation |
| Gender | patsex | $1 | N/A | N/A | N/A | N/A | No transformation |
| DEERS Enrollment Site | denrsite | $4 | N/A | N/A | N/A | N/A | No transformation |
| **MDR Omni CAD Merge** | | | | | | | |
| Residence Catchment Area | catch | $4 | N/A | N/A | N/A | N/A | Based on matching FY, FM and deerszip; if sponsvc=A then set equal to ACATCH, if sponsvc = F then set equal to FCATCH; if sponsvc in (M, N, V) then set equal to NCATCH, otherwise set equal to OCATCH. If zip code not found in MDR Omni-CAD, set equal to ‘0999’ |
| Residence PRISM Area | prism | $4 | N/A | N/A | N/A | N/A | Based on matching FY, FM and deerszip; 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’ |
| Residence Region | resreg | $2 | N/A | N/A | N/A | N/A | MOD\_REG, based on matching FY, FM and deerszip |
| Residence TNEX Region | restnex | $1 | N/A | N/A | N/A | N/A | HSSCREG, based on matching FY, FM and deerszip |
| Patient MTF Service Area | mtfsvcarea | $4 | N/A | N/A | N/A | N/A | Based on matching FY, FM, zip and sponsor service (A = Army, F = Air Force, N, V, M = Navy, O=All Other.) |
| Provider Catchment Area | pvcatch | $4 | N/A | N/A | N/A | N/A | Based on matching FY, FM and provzip; set = OCATCH. If provzip not found in MDR Omni-CAD, set equal to ‘0999’ |
| Provider PRISM Area | pvprism | $4 | N/A | N/A | N/A | N/A | Based on matching FY, FM and provzip; set = OPRISM. If provzip not found in MDR Omni-CAD, set equal to ‘0999’ |
| Provider TNEX Region | pvtnex | $1 | N/A | N/A | N/A | N/A | HSSCREG, based on matching FY, FM and deerszip |
| Provider MTF Service Area | pmtfsvcarea | $4 | N/A | N/A | N/A | N/A | Based on matching FY, FM, provzip. (A = Army, F = Air Force, N, V, M = Navy, O=All Other.) |

1. Refresh Frequency

Monthly

1. Quality Review Requirements

In order to ensure processing is done correctly, several basic quality review requirements are presented in this section.

1. Basic Data Flow Process Check: A spreadsheet should be maintained that tracks record counts associated with each data step used in processing. Record counts from the raw monthly feeds should be recorded and checked. Significant variations in DED data should be noted and explored with BEA.
2. Proc contents should be reviewed and compared against specifications to ensure conformance.
3. Frequency tabulations should be compared from cycle to cycle for the following variables: ACV, age group, beneficiary category, cdt, cy, cm, fy, fm, deers enrollment site, dmisid,ethnic code, patient’s sex, privilege code, race, residence region, residence TNEX region, service, common beneficiary.
4. Each month the values observed in certain fields should be checked to see if new or modified values are introduced. Fields that should be checked include raw fields used by the processor to derive other fields, and raw fields used to control the flow of processing.
5. Routine feed and file management procedures should be followed for the MDR DRC processor.
6. Data Marts

N/A