**12 January 2012**

CDR Historical Procedures

for the

MHS Data Repository (MDR)

(Version 1.00.00)

Current Specification

Revision History

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| --- | --- | --- | --- | --- |
| Version | Date | Originator | Para/Tbl/Fig | Description of Change |
| 1.00.00 | 01/07/2012 | D. Sexton |  | Original document |

**CDR HISTORICAL PROCEDURES FOR THE MDR**

1. **SOURCE**

Clinical Data Repository (CDR). Initial base table was created by extracting Fiscal Year 2009 and later from the Clinical Data Mart Historical Procedures table. Feeds are applied to the base table after extraction of the initial dataset.

1. **TRANSMISSION (Format and Frequency)**

Transmission of Historical Procedures data occurs weekly from the CDR to the DHSS Feed Node.

1. **ORGANIZATION AND BATCHING**

There is one cumulative Historical Procedures file, containing all patient-reported past procedures. Historical Procedures are processed weekly.

1. **RECEIVING FILTERS**

N/A. All new records are sent from CDR.

1. **FIELD TRANSFORMATIONS AND DELETIONS FOR MDR CORE DATABASE**

This section of the functional specification describes the data merges and field transformations that are necessary to append many of the fields in the MDR Historical Procedures (HP) dataset. Derivation rules for elements not described in this section are described in Table 2.

Table 1 lists all of the external reference files that are used to merge to the HP dataset.

Table 1: External reference table merges:

| **Merge** | **Merge to** | **Date Matching** | **Additional Matching** |
| --- | --- | --- | --- |
| MDR CDR Patient table | Master |  | Match to Historical Procedure records based on CDR Patient ID. |
| MEDCIN\_LIST\_LU table | Master |  | Match on MEDCIN\_ID |
| Longitudinal VM4 File | Master | Processing date | Match on EDI\_PN obtained from Patient table |

1. **INITIALIZATION:**

The MDR HP data file was initialized using records from the CDM Historical Procedures database. Records were retrieved directly and processed according the rules in table 1.

1. **UPDATING THE MASTER DATABASE**

The key used to update the MDR HP dataset is the CDR\_HISTPROC\_ID.

* Records in the feed with new CDR\_HISTPROC\_ID’s are added to the MDR master Historical Procedures table.
* Records in the feed with matching CDR\_HISTPROC\_ID’s are processed as updates or deletes CDR\_HISTPROC\_ID’s are processed as updates or deletes; if the ACTION field has a “D”, the record is deleted from the master Historical Procedures table. If the ACTION field is not “D” (regardless of whether it is an “I” or “U”), the record in the master Historical Procedures table is updated by selecting the largest value of the Feed Date (FEEDDATE) for any given Historical Procedures key. The reason for disregarding the “I’s” and “U’s” is because these values prove unreliable; some records labeled as “insert” have matching records in the master database, and some records labeled “update” or “delete” do not have matching records in the master database. After merging in the new batch of data, additional processing occurs, as described in table 2.

1. **FILE LAYOUT AND FINAL FIELD DERIVATIONS**

Table 2 describes the final MDR HP file after processing.

**Table 2: Final Fields in the MDR Historical Procedures Dataset.**

| **Data Element Name** | **SAS Variable Name in MDR** | **Format** | **Source Field # and Var Name in Feed** | **Source Element from CDM** | **Transformation Rule** |
| --- | --- | --- | --- | --- | --- |
| MEDCIN ID | MEDCIN\_ID | $8 | 6 (MEDCIN\_ID) | MEDCIN\_ID | No transformation |
| CDR Historical Procedures ID | CDR\_HISTPROC\_ID | $20 | 3 (EVENT\_ID) | SOURCE\_HIST\_PROC\_ID | No transformation. |
| CDR Patient ID | CDR\_PATIENT\_ID | $20 | 4 (UNIT\_NUMBER) | N/A (See notes in section VI. Initialization.) | No transformation. |
| CDW Historical Procedures ID | CDW\_HIST\_PROC\_ID | 21 | N/A | CDW\_HIST\_PROC\_ID | No transformation. |
| Procedure Date | PROCEDURE\_DATE | SAS DATE | PROCEDURE DATE | PROCEDURE\_DATE | Set to the SAS date equivalent of the 1st 8 characters of the procedure date. |
| **Internally Derived Fields** | | | | | |
| Fiscal Month | FM | $2 | N/A | N/A | Fiscal month equivalent of calendar month of Procedure Date. |
| Fiscal Year | FY | $4 | N/A | N/A | Fiscal year equivalent of calendar year of Procedure Date. |
| Feed Date | FEEDDT | $8 | N/A | N/A | Set to null if the record is from CDM., otherwise, set to the date of the feed in which this entry most recently came. YYYMMDD format.. |
| Patient Age | PATAGE | 3 | N/A | N/A | Current patient age, derived from the DOB and the date of processing. If there is no match in the Patient table then the resulting patient age is null. |
| Age Group Code | AGEGRP | $1 | N/A | N/A | If age in [0,4] then set to A. If age in [5-14] then set to B. If age in [15-17] then set to C. If age in [18-24] then set to D. If age in [25-34] then set to E. If age in [35-44] then set to F. If age in [45-64] then set to G. If age [65 or over] then set to H. If age unknown or there is no match in the Patient table, then set to Z. |
| **Derived from Merge to Patient Table** | | | | | |
| EDIPN | EDI\_PN | $10 | N/A | N/A | EDI\_PN, from the MDR CDR Patient table. If there is no match, set EDI\_PN to null. |
| Patient Category | PATCAT | $3 | N/A | N/A | Patient Category Code, from the MDR CDR Patient table. If no match found then set to null. ". |
| Patient Date of Birth | PATDOB | 8 | N/A | N/A | Patient Date of Birth, from the MDR CDR Patient Table. If no match found then set to null. |
| Patient SSN | PATSSN | $9 | N/A | N/A | Patient SSN, from the MDR CDR Patient table. If no match found then set to null. |
| Sponsor SSN | SPONSSN | $9 | N/A | N/A | Sponsor SSN, from the MDR CDR Patient table. If no match found then set to null. |
| Universal Patient Identifier | UPID | $14 | N/A | N/A | Universal Patient Identifier, from the MDR CDR Patient table. If no match found then set to null. |
| **Derived from Merge to MEDCIN Table** | | | | | |
| CPT | CPT | $5 | N/A | CPT4\_CODE | CPT, from MEDCIN reference table. If no match for the MEDCIN\_ID, set to null. |
| ICD9 | ICD | $8 | N/A | ICD9\_CODE | ICD, from MEDCIN reference table. If no match for the MEDCIN\_ID, set to null. |
| MEDCIN DESCRIPTION | MEDCIN\_DESC | $250 | N/A | MEDCIN\_DESCRIPTION | MEDCIN description, from MEDCIN reference table. If no match for the MEDCIN\_ID, set to null. |
| **Derived from merge to LVM-4** | | | | | |
| DEERS Alternate Care Value | ACV | $1 | N/A | N/A | Fill with ACV from LVM based on EDIPN, if the date of processing is between the begin and end date associated with the ACV, else if ACV is blank after LVM merge and bencat is ACT or GRD then set ACV to M, otherwise set to null. |
| DEERS Beneficiary Category | BENCAT | $3 | N/A | N/A | Fill with DEERS beneficiary category from LVM based on EDIPN, if the date of processing is between the begin and end date associated with the DEERS beneficiary category. If no match for the person, set to “UNK”. |
| DEERS Common Beneficiary Category | COMBEN | $1 | N/A | N/A | Fill with DEERS common beneficiary category from LVM based on EDIPN, if the date of processing is between the begin and end date associated with the DEERS common beneficiary category. If no match for the person, set to “3”. |
| DEERS HCDP | HCDP | $3 | N/A | N/A | Fill with DEERS HCDP code from LVM based on EDIPN, if the date of processing is between the begin and end date associated with the DEERS HCDP code. If no match for the person, set to null. |
| DEERS Relationship | RELATIONSHIP | $1 | N/A | N/A | Fill with DEERS Relationship from the LVM based on EDIPN and SPONSSN. If Relationship not found in LVM merge, then derive from FMP from Patient Table Merge. If no match in the Patient table, then set to null. |
| DEERS Sponsor Service Aggregate | DSVCAGG | $1 | N/A | N/A | Fill with DEERS sponsor service (aggregate) from LVM based on EDIPN, if the date of processing is between the begin and end date associated with the DEERS sponsor service (aggregate). If no match for the person, set to null. |
| DEERS Sponsor Service | DSPONSVC | $1 | N/A | N/A | Fill with DEERS sponsor service from LVM based on EDIPN, if the date of processing is between the begin and end date associated with the DEERS sponsor service. If no match for the person, set to null. |
| DEERS ZIP Code | DEERSZIP | $5 | N/A | N/A | Fill with DEERS ZIP code from LVM based on EDIPN, if the date of processing Is between the begin and end date associated with the DEERS ZIP code. If no match for the person, set to null. |
| DEERS Enrollment DMISID | DENRSITE | $4 | N/A | N/A | Fill with enrollment DMISID from LVM based on EDIPN, if the date of processing is between the begin and end date associated with the enrollment site. If no match for the person, set to null. |
| Gender | GENDER | $1 | N/A | N/A | Fill with gender from LVM based on EDIPN. If LVM has no matching EDIPN, gender from Historical Procedures source file is used. If no match for the person, set to null. |
| Current Eligibility | CUR\_ELIG | 8 | N/A | N/A | If LVM has matching EDI\_PN, then 1 else 0. |

1. **REFRESH FREQUENCY**

The file is refreshed weekly.

1. **DATA MARTS**

N/A