**3 March 2014**

CHCS Standard Insurance Table (SIT) Table

for the

Centralized Billing Event Repository

in the MHS Data Repository (MDR)

(Version 1.06.02)

Future Specification

**Revision History**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Version** | **Date**  | **Para/Tbl/Fig** | **Originator** | **Description of Change** |
| 1.01.00 | 5/25/2011 | * Initial publication
 | W. Funk |  |
| 1.02.00 | 12/19/2011 | * Section 6 and table 3.
 | W. Funk | Added file date, date and time modified and record type. Incorporated DMDC feed. |
| 1.03.00 | 5/3/2012 | * Section 4, Section 7, Appendix A, Appendix B, Section 6
 | W. Funk | Changed file naming convention. Added update record type. Clarified update logic. Added DMDC file restructuring. Added raw DMDC layout. A filter was applied to the DMDC data. |
| 1.04.00 | 8/8/2012 | * Section 3
* Section 6
* Section 7
* Section 8, Table 2
* Appendix A, B
 | K. Hofmann | Added date of initial DMDC file.Edited update process.Drop useless variables from CHCS feed.Edited rules for derivation of variables in CHCS feed.Edited pre-processing rules for DMDC file.Removed Appendix B. |
| 1.05.00 | 8/22/2012 | * Section 3
* Section 8, Table 2
* Appendix A
 | K. Hofmann | Changed date to reflect new files from DMDC.Increased maximum number of loops to 5. |
| 1.06.00 | 9/21/2012 | * Section 7
 | K. Hofmann | Indicated what fields are dropped for DMDC baseline file. |
| 1.06.01 | 9/21/2013 | * Section 3
* Section 12
 | W. Funk | * Added reference to Service text file out.
 |
| 1.06.02 | 3/3/2014 | * Section 12
 | W. Funk | * Clarified the delimiter for the Service text file identified in 1.06.01
 |

**CHCS Standard Insurance Table (SIT) Processing for the CBER**

1. Background:

The Centralized Billing Event Repository (CBER) is intended to assist the Services in billing other payors for services provided in Military Treatment Facilities (MTFs). The SIT table includes information about insurance policies that MHS beneficiaries have. The initial “seed” file to prepare this data set was provided by the Defense Manpower Data Center (DMDC), but updates are provided from the CHCS Hosts.

1. Source:

 The primary data feeds for the SIT file are:

* The DMDC SIT feed is described in Appendix A.
* CHCS SIT data are feeds described in ICD XX.
1. Transmission (Format and Frequency):

The DMDC feed file was provided via secure FTP on 8/22/12. The CHCS data feeds are transmitted daily to the MDR feed node, according to the rules specified in ICD XX. The transfer shall occur via secure FTP. The SIT feeds must be named so that the CHCS Host that sends the feed can be identified as well as the file date. Details of file transfer must be coordinated with the DHSS program office.

1. Organization and Batching

Source Data: The first step in MDR processing is to store the raw files in *mdr/cber/raw/filename from ICD*

CBER processing will occur on a weekly basis. Records will be batched and made available for processing each *pick-a-day DHSS*. The initial batch will contain the first week of feed data. Thereafter, batches will include all feeds that have been sent since the previous batching. Unprintable characters should be removed from data prior to submission for processing

Output Products: The CBER SIT processor produces the data file stored in: mdr/pub/cber/sit.sds. The CBER SIT processor will also produce a text file for the Services. This file is described in Section XII

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

1. Receiving Filters

No filters were applied to the incoming DMDC seed data. Filters are applied to the CHCS data as specified in ICD XX.

1. Update Process

The initial DMDC SIT file requires a one-time pre-processing before CHCS-based updates can be applied. This pre-processing (described in Appendix A) is done by TMA/DHCAPE and will be provided to DHSS. Once the initial file has been prepared, updates from CHCS will be applied each week by DHSS, beginning with the week following the day after the initial DMDC feed was provided. The weekly feeds will be batched from daily feeds from each CHCS host.

Minimal pre-processing is required of the CHCS batched data. First, unprintable characters are removed from records prior to processing. Second, the feeds are de-duplicated. To de-duplicate the data, only the most recently reported record (based on Carrier Date/Time Last Modified) for each Carrier ID is kept. Further processing of the CHCS data is detailed in Table 2.

To initialize the MDR CBER SIT file, the first pre-processed batch of weekly CHCS SIT data is appended to the DMDC file provided by DHCAPE. To de-duplicate the CHCS and DMDC data, records are sorted by Carrier ID and Carrier Date/Time Last Modified, and only the most recently reported transaction is retained. If there is ever a tie (where two records for the same Carrier ID have the same Carrier Date/Time Last Modified), pick the record with the lower CHCS Host DMISID. The resulting data set becomes what is known as the “master file”. Each week thereafter, the pre-processed CHCS files are appended to the master and de-duplicated in the same manner described above.

1. Field Transformations and Deletions for MDR Core Database

Per direction of DHCAPE, records with a Carrier Status Code (HIC\_STAT\_CD in DMDC data) of “P” or “R” are removed from the database. Business rules for appended fields are contained in the table in Section VIII, or in an appendix, referenced in that table.

The fields Record # (1st field in CHCS feed), Record Type (3rd field in CHCS feed), and Coverage Date/Time Updated (32nd field in CHCS feed) are deleted from the feeds, per direction of DHCAPE.

1. Record Layout and Content

The table below describes the content of the CBER Standard Insurance Table SAS dataset.

**Table 2: CBER SIT Data Set Structure and Business Rules**

| **Data Element** | **SAS Name** | **Format** | **Order in CHCS Feed** | **Business Rule** |
| --- | --- | --- | --- | --- |
| CHCS Host DMISID | dmisid | $4 | 2 | No transformation. |
| Carrier ID | carrier | $9 | 4 | No transformation.  |
| Carrier Name | name | $35 | 5 | No transformation. |
| Carrier Cross Reference Carrier Identifier | xref | $9 | 6 | No transformation. |
| Carrier Status Code | status | $1 | 7 | No transformation. |
| Carrier Deactivation Date | deact\_dt | CCYYMMDD | 8 | Format as CCYYMMDD. |
| Carrier Website Address | url | $80 | 9 | No transformation. |
| Carrier Customer Service Email Address | cs\_email | $80 | 10 | No transformation. |
| Carrier POC Name | poc | $70 | 11 | No transformation. |
| Carrier POC Telephone Number | poc\_phone | $20 | 12 | No transformation. |
| Carrier POC Telephone Number Extension | poc\_phone\_ext | $5 | 13 | No transformation. |
| Carrier POC Email Address | poc\_email | $80 | 14 | No transformation. |
| Carrier Standard Comment | comment | $60 | 15 | No transformation. |
| Carrier Date/Time Last Modified | car\_updt | CCYYMMDDHHMMSS | 16 | Format as CCYYMMDDHHMMSS. |
| Number of Coverage Types | num\_cvg | Num | 17 | No transformation.  |
| Coverage Type Code *n* (n=1 to 5) | cvg\_type*n* | $2 | 18 | No transformation. |
| Coverage Status Code *n* (n=1 to 5) | cvg\_stat*n* | $1 | 19 | No transformation. |
| Coverage Standard Comment *n* (n=1 to 5) | cvg\_cmt*n* | $60 | 20 | No transformation. |
| Coverage Payer Type Code *n* (n=1 to 5) | payer\_type*n* | $1 | 21 | No transformation. |
| Coverage Payer Address, Line 1 *n* (n=1 to 5) | address1\_*n* | $50 | 22 | No transformation. |
| Coverage Payer Address, Line 2 *n* (n=1 to 5) | address2\_*n* | $50 | 23 | No transformation. |
| Coverage Payer City *n* (n=1 to 5) | city*n* | $30 | 24 | No transformation. |
| Coverage Payer State *n* (n=1 to 5) | state*n* | $2 | 25 | No transformation. |
| Coverage Payer ZIP Code *n* (n=1 to 5) | zip*n* | $5 | 26 | No transformation. |
| Coverage Payer ZIP Code Extension *n* (n=1 to 5) | zip\_ext*n* | $4 | 27 | No transformation. |
| Coverage Payer Country *n* (n=1 to 5) | country*n* | $2 | 28 | If country is blank, and state is filled in, assign country = ‘US’. Else no transformation. |
| Coverage Payer Telephone Number *n* (n=1 to 5) | cvg\_phone*n* | $20 | 29 | No transformation. |
| Coverage Payer Telephone Number Extension *n* (n=1 to 5) | cvg\_phone\_ext*n* | $5 | 30 | No transformation. |
| Coverage Payer Fax Number *n* (n=1 to 5) | cvg\_fax*n* | $20 | 31 | No transformation. |
| File Date | file\_dt | CCYYMMDD | N/A | Data taken from header in feed record. Format as CCYYMMDD. |
| Original Record Source | orec | $1 | N/A | For CHCS Records: Set to “C”. DMDC records will have the value “D”. Do not change this value for the DMDC records. |
| Current Record Source | crec | $1 | N/A | If the record has never been updated in CBER, set to orec. If a CHCS record has since updated the DMDC baseline record, set to “C”. |
| Last CBER Update Date | last\_updt | CCYYMMDD | N/A | Set to the most recent date that this record was affected in CBER processing (processing date) |

1. Refresh Frequency

Weekly

1. Quality Review Requirements

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

1. Records in the DMDC feed data should be tracked to ensure that no segments are lost when transforming the format per Appendix A.
2. Frequency distributions should be conducted before and after the DMDC feed transformation and values compared to ensure the integrity of the data.
3. The first 10 rows of output should be manually inspected with each process to ensure that expected values are appearing in the data.
4. A spreadsheet will be maintained to track record flows through the process. This spreadsheet will include, but not be limited to, the number of records in the master dataset before processing, the number of records in the feed, the number of records after deduplicating the feeds, the number of new records, the number of update records, and the number of records in the final dataset.
5. When developing the processor, frequency distributions should be reviewed for each element, based on whether the data came from DMDC or CHCS. Any differences in formatting should be reported to the functional specification author, prior to release of data.
6. Data feeds shall be tracked to ensure that feeds are received from each CHCS host each day. Feeds that are not received should be investigated in the same manner as other CHCS-based feed data.
7. Data Marts

N/A

1. Special Outputs

The CBER SIT SAS dataset is written to a “^” delimited text format, for provision to the Services. This file is prepared every time the CBER SIT processor is run and represents cumulative insurance company information. The format of the table is described in table 3.

Table 3: Format of Service text file output

| **Domain** | **Data Element Name** | **Output Position** | **Format** | **Rule** |
| --- | --- | --- | --- | --- |
| Carrier | Carrier ID | 1 | $9  | carrier |
| Carrier | Carrier Name | 2 | $35  | name |
| Carrier | Carrier Cross Reference Carrier Identifier | 3 | $9  | xref |
| Carrier | Carrier Status Code | 4 | $1  | status |
| Carrier | Carrier Deactivation Date | 5 | CCYYMMDD | deact\_dt |
| Carrier | Carrier Website Address | 6 | $80  | url |
| Carrier | Carrier Customer Service Email Address | 7 | $80  | cs\_email |
| Carrier | Carrier POC Name | 8 | $70  | poc |
| Carrier | Carrier POC Telephone Number | 9 | $20  | poc\_phone |
| Carrier | Carrier POC Telephone Number Extension | 10 | $5  | poc\_phone\_ext |
| Carrier | Carrier POC Email Address | 11 | $80  | poc\_email |
| Carrier | Carrier Standard Comment | 12 | $60  | comment |
| Carrier | Carrier Date/Time Last Modified | 13 | CCYYMMDDHHMMSS | car\_updt |
| Coverage | Number of Coverage Types | 14 | Num | num\_cvg |
| Housekeeping | Last CBER Update Date | 15 | CCYYMMDD | last\_updt |
| Coverage | Coverage Type Code 1 n | 16+14(n-1); n=1 to 5 | $2  | cvg\_type*n* |
| Coverage | Coverage Status Code *n* (n=1 to 5) | 17+14(n-1); n=1 to 5 | $1  | cvg\_stat*n* |
| Coverage | Coverage Standard Comment *n* (n=1 to 5) | 18+14(n-1); n=1 to 5 | $60  | cvg\_cmt*n* |
| Coverage | Coverage Payer Type Code *n* (n=1 to 5) | 19+14(n-1); n=1 to 5 | $1  | payer\_type*n* |
| Coverage | Coverage Payer Address, Line 1 *n* (n=1 to 5) | 20+14(n-1); n=1 to 5 | $50  | address1\_*n* |
| Coverage | Coverage Payer Address, Line 2 *n* (n=1 to 5) | 21+14(n-1); n=1 to 5 | $50  | address2\_*n* |
| Coverage | Coverage Payer City *n* (n=1 to 5) | 22+14(n-1); n=1 to 5 | $30  | City*n* |
| Coverage | Coverage Payer State *n* (n=1 to 5) | 23+14(n-1); n=1 to 5 | $2  | State*n* |
| Coverage | Coverage Payer ZIP Code *n* (n=1 to 5) | 24+14(n-1); n=1 to 5 | $5  | Zip*n* |
| Coverage | Coverage Payer ZIP Code Extension *n* (n=1 to 5) | 25+14(n-1); n=1 to 5 | $4  | zip\_ext*n* |
| Coverage | Coverage Payer Country *n* (n=1 to 5) | 26+14(n-1); n=1 to 5 | $2  | Country |
| Coverage | Coverage Payer Telephone Number *n* (n=1 to 5) | 27+14(n-1); n=1 to 5 | $20  | cvg\_phone*n* |
| Coverage | Coverage Payer Telephone Number Extension *n* (n=1 to 5) | 28+14(n-1); n=1 to 5 | $5  | cvg\_phone\_ext*n* |
| Coverage | Coverage Payer Fax Number *n* (n=1 to 5) | 29+14(n-1); n=1 to 5 | $20  | cvg\_fax*n* |

**Appendix A: DMDC Layout and Preprocessing.**

The raw DMDC data are read in and stored according to the rules in table 3. Data fields and derivations are performed as noted to ensure that the DMDC data is prepared to be turned into an MDR file.

**Table 3: Baseline CBER SIT Data Set (from DMDC) Structure and Business Rules**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Data Element** | **SAS Name** | **Format** | **Element from DMDC** | **Business Rule** |
| CHCS Host DMISID | dmisid | $4 | N/A | Set to “DMDC” |
| Carrier ID | carrier | $9 | HIC\_ID | No transformation. |
| Carrier Name | name | $35 | HIC\_NM | No transformation. |
| Carrier Cross Reference Carrier Identifier | xref | $9 | HIC\_XREF\_ID | No transformation. |
| Carrier Status Code | status | $1 | HIC\_STAT\_CD | No transformation. |
| Carrier Deactivation Date | deact\_dt | CCYYMMDD | HIC\_DAC\_DT | No transformation. |
| Carrier Website Address | url | $80 | HIC\_WSITE\_ADDR\_TX | No transformation. |
| Carrier Customer Service Email Address | cs\_email | $80 | HIC\_CUST\_SVC\_EMA\_TX | No transformation. |
| Carrier POC Name | poc | $70 | HIC\_POC\_FLNM\_TX | No transformation. |
| Carrier POC Telephone Number | poc\_phone | $20 | HIC\_POC\_TA\_LN\_ID | No transformation. |
| Carrier POC Telephone Number Extension | poc\_phone\_ext | $5 | HIC\_POC\_TA\_LN\_EXT\_ID | No transformation. |
| Carrier POC Email Address | poc\_email | $80 | HIC\_POC\_EMA\_TX | No transformation. |
| Carrier Standard Comment | comment | $60 | HIC\_STND\_CMT\_TX | No transformation. |
| Carrier Date/Time Last Modified | car\_updt | CCYYMMDDHHMMSS | N/A | Date and time that DMDC sent seed file. |
| Number of Coverage Types | num\_cvg | Num | N/A | Derive by counting the number of time the SIT coverage information that follows is repeated in the feed data. |
| Coverage Type Code *n* (n=1 to 5) | cvg\_type*n* | $2 | HIC\_CVG\_TYP\_CD | No transformation. |
| Coverage Status Code *n* (n=1 to 5) | cvg\_stat*n* | $1 | HICC\_STAT\_CD | No transformation. |
| Coverage Standard Comment *n* (n=1 to 5) | cvg\_cmt*n* | $60 | HICC\_STND\_CMT\_TX | No transformation. |
| Coverage Payer Type Code *n* (n=1 to 5) | payer\_type*n* | $1 | HIC\_CVG\_PYR\_TYP\_CD | No transformation. |
| Coverage Payer Address, Line 1 *n* (n=1 to 5) | address1\_*n* | $50 | HICC\_MA\_LN1\_TX | No transformation. |
| Coverage Payer Address, Line 2 *n* (n=1 to 5) | address2\_*n* | $50 | HICC\_MA\_LN2\_TX | No transformation. |
| Coverage Payer City *n* (n=1 to 5) | city*n* | $30 | HICC\_MA\_CTY\_NM | No transformation. |
| Coverage Payer State *n* (n=1 to 5) | state*n* | $2 | HICC\_MA\_ST\_CD | No transformation. |
| Coverage Payer ZIP Code *n* (n=1 to 5) | zip*n* | $5 | HICC\_MA\_ZIP\_CD | No transformation. |
| Coverage Payer ZIP Code Extension *n* (n=1 to 5) | zip\_ext*n* | $4 | HICC\_MA\_ZIPX\_CD | No transformation. |
| Coverage Payer Country *n* (n=1 to 5) | country*n* | $2 | HICC\_MA\_CTRY\_CD | No transformation. |
| Coverage Payer Telephone Number *n* (n=1 to 5) | cvg\_phone*n* | $20 | HICC\_TA\_LN\_ID | No transformation. |
| Coverage Payer Telephone Number Extension *n* (n=1 to 5) | cvg\_phone\_ext*n* | $5 | HICC\_TA\_LN\_EXT\_ID | No transformation. |
| Coverage Payer Fax Number *n* (n=1 to 5) | cvg\_fax*n* | $20 | HICC\_FAX\_TA\_LN\_ID | No transformation. |
| File Date | file\_dt | CCYYMMDD | N/A | Date that DMDC sent seed file. |
| Original Record Source | orec | $1 | N/A | Set to “D”. |
| Current Record Source | crec | $1 | N/A | Set to “D”. |
| Last CBER Update Date | last\_updt | CCYYMMDD | N/A | Date that DMDC sent seed file. |