**28 September 2016**

Risk Adjustment Specification for the MDR

(Version 1.05.00)

Future Specification

**Revision History**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Version** | **Date**  | **Para/Tbl/Fig** | **Originator** | **Description of Change** |
| 1.00.00 | 2/4/2013 | * Whole Document
 | W. Funk | * Initial version
 |
| 1.01.00 | 10/17/2013 | * Section II
* Table 1
* Section VI
 | W. Funk & J. MacLeod | * Section II: Noted that the Designated Provider data will be incorporated in a future version.
* Table 1: Established naming convention and member name
* Section VI: Clarified logic for field transformations
* Table 2: Added the Risk\_Source variable
 |
| 1.01.00 | 11/19/2013 | * Table 2
 | J. MacLeod | * Clarified logic for the overseas and age\_65 flags
 |
| 1.02.00 | 1/27/2014 | * Section VI
* Table 2
* Throughout document
 | W. Funk & J. MacLeod | * Section VI: Added logic for high risk neonate DXC categories to check the patient’s age.
* Table 2: Added two weighted workload variables and one flag
* Throughout document – updated the number of diagnosis categories from 84 to 92
 |
| 1.03.00 | 3/12/2014 | * Section VI
* Table 7
 | W. Funk, J. MacLeod, & Geof Hileman | * Section VI: Added logic for deriving weighted workload and high cost user flags
* Section VI: Added some detail to the derivation of the number of months enrolled in Prime and to the number of months overseas.
* In Table 7, corrected the layout of the reference file.
 |
| 1.03.01 | 10/22/2014 | * Section VI
 | D. McDonald for W. Funk | * Specified the truncation level (100K) from which to take the risk values to replace into the PPS Lives data element
 |
| 1.04.00 | 4/2/2015 | * Section VI, Table 2 and Table 3
 | W. Funk | * Added new DEERS fields
 |
| 1.04.01 | 4/6/2015 | * Section VI, Table 2 and Table 3
 | J. MacLeod | * Fixed the names of the assigned uic and attached uic fields. They were reversed
 |
| 1.04.02 | 4/17/2015 | * Section VI
* Section VI, Table 2 and Table 3
 | J. MacLeod | * In bullet 11, added marital status
* Incorporated Designated Provider enrollees into the derivation logic for the ENR\_DMISID fields.
* Increased the length of the PCMID from 10 to 32
 |
| 1.04.03 | 4/24/2015 | * Section VI, Table2 and Table 3
 | J. MacLeod | * Modified logic for ENR\_DMISID fields for the DP enrollees
 |
| 1.05.00 | 9/28/2016 | * Section VI, Table 2, Table 3, Appendix A
* Table 2
 | W. Funk | * Removed pharmacy mappings
* Added DEERS FM
 |

**MDR Risk Adjustment**

1. Background:

A new risk adjustment model has been developed by Health Affairs and will be implemented in measurements of per member per month costs in the MHS. Other uses are also envisioned, including panel sizing, identification of patients who may need case management, analyses of efficiency, and classifications of persons with diseases. The model assigns a relative financial risk score to each beneficiary, based on their disease profile and other demographic factors. The basic premise is that a beneficiary’s health data (diagnoses and drugs) will be collected for a rolling twelve months. These conditions are then grouped into diseases and drug categories which carry with them weights that reflect the relative financial risk associated with having the condition or taking the drug. After adjusting for duplications among similar diseases, the weights are added across all of the assigned disease and drug categories (also including three types of additional additive factors) to arrive at a relative financial risk score for an individual. There is also a demographic only model that is used when people don’t have enough reliable data to assign a score. There are several versions of the model that will be used and stored in the MDR (different versions depending upon how ‘catastrophic caps’ are handled, referred to as different levels of truncation) but only one version of the risk scores will go to M2 in the initial phase.

1. Source:

The sources for the MDR Risk Adjustment Processor are the MDR SIDR, CAPER, TED-I, PDTS, TED-N, DEERS, and Designated Provider data files. The initial version of the software will not include the Designated Provider data. It will be incorporated at a later date.

1. Transmission (Format and Frequency):

No transmission is necessary. The MDR Risk Adjustment file is processed from existing MDR files.

1. Organization and Batching

Output Products: The MDR Risk Adjustment processor has two output files described in table 1.

**Table 1: Risk Adjustment Processor Output Products**

|  |  |  |
| --- | --- | --- |
| **MDR File** | **File Naming Convention** | **Member Name** |
| MDR Risk Adjustment Key File | /mdr/pub/riskadjustment | risk\_adjustment |
| MDR Health Risk Category File | /mdr/pub/riskadjustment | health\_risk |

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

N/A

1. Field Transformations and Update Process

Steps:

Note for the steps listed below: for end-of-year processing, done once 4 months after the end of a fiscal year, the reporting period and the date range for the LELG data is N to N-12, instead of N to N-15 and N-4 to N-15 as it is for all other processing cycles. This is because, by four months past the end of a fiscal year, the population and workload data for a given FY are considered to be mature.

1. The first step involves gathering inputs from various MDR files (SIDR, CAPER, TEDs Non Pharmacy and PDTS andDesignated Provider) and shaping/filtering them to prep for further processing. This document assumes that this processor is stand-alone, but this step could be accomplished using interim files as well. To generate the required outputs, first the reporting period needs to be defined. Preparation of the risk adjustment files will be done at the beginning of each month, with availability each month corresponding to about the time the monthly DEERS data would be released. The reporting period is defined by the DEERS month to which the risk scores will be appended. Specifically, if the DEERS month is month N, the reporting period will cover dates between month N-15 and month N-4 inclusive. After limiting the required data to the reporting period[[1]](#footnote-1), retrieve all diagnoses[[2]](#footnote-2) from the records; except:
	1. For CAPER/SIDR: any diagnosis that is recorded in the same encounter (CAPER or SIDR only) as a V705 4 or V705 6 is excluded.
	2. For TED-N and Designated Provider Non-Institutional: Only include the first line item per unique record key.
2. Follow the same steps for PDTS, ~~except keeping the NDC instead of the diagnosis code.~~
3. On each data record (SIDR, CAPER, TEDI, and TEDNI, and PDTS), if the patient’s age is < 1 or the person is a Prime enrollee, assign weighted workload fields to each record as follows, otherwise set them to 0:
	1. CAPER:

If (substr(MEPR3,1,1)=’A’) then WW=0

Else if (fac\_flag = ‘F’) then WW=apcaggwt\*71.884 + trvuagg\*34.023

Else WW = trvuagg\*34.023

* 1. SIDR & TEDI:

WW = mental health bed days \*887 + Non-mental health RWP\*8849

* 1. TEDNI:

If (place of service = 21, 01, or 51) then WW=0

Else if (place of service in ('02','03','04','05','06','07','08','09','10','12','13','14','15','16', '17','18','19','26','27','28','29','30','31','32','33','34','52','54','55','56','61','62','99') or typsvc2 IN (‘A’,’B’,’D’,’G’,’I’,’M’)) then WW = total amount paid (summed at claim level over line items retained)

Else if (totrvu = .) then WW== total amount paid (summed at claim level over line items retained)

Else WW = TOTRVU \* 34.023

* 1. PDTS:

if source IN ('C','D') then WW= full cost;

else if source IN ('T','M') then WW = amount paid;

else WW = 0;

Determine the full cost as follows:

* + If Source System = “D”, Dispensing Fee/Cost = TFL Script O&M Price + TFL Script Mil Pay Price – obtain the TFL script variables via a merge to the DMISID Index table by Treatment DMIS ID and FY.
	+ If Source System = “C” then Dispensing Fee/Cost = 0

Full Cost = Ingredient Cost + Dispensing Fee

1. Data types with more than one diagnosis code per record will need to be reshaped in the preparation of these files. Outputs from this step include: person ID, diagnosis, setting [1=SIDR,TED-I, DP-I, 2=CAPER, TED-N, DP-N], a rolling twelve month weighted workload, a fiscal year to date weighted workload, and number of diagnoses. The pharmacy interim file would have ~~NDC,~~ person ID, a rolling twelve month weighted workload, and a fiscal year to date weighted workload. The fiscal year to date field, should be for the FY at month N-4.
2. There is a reference file~~s~~ to group the diagnoses ~~and NDCs~~ into categories and to assign demographic values. There is also a reference file that is used to address duplication of patients across levels of complexity within a disease state. File layouts are provided at the end of this document. These references will be updated no more frequently than once a year.
3. Pre-Processing of Disease ~~and Drug Category~~ File. In this step, the workload files (~~excluding the PDTS~~) prepared are combined. That is, the diagnosis-related outputs are concatenated (~~all but PDTS~~) and then summarized so that the diagnosis file will include the person ID, a rolling twelve-month weighted workload, a fiscal year to date weighted workload, diagnosis code, the setting, the number of records (for the person, diagnosis) from either of SIDR/TEDI, DP Institutional and the number of records in either of CAPER, TED-N, and DP Non-Institutional. The PDTS file still contains only the person ID, NDC, a rolling twelve-month weighted workload, and a fiscal year to date weighted workload.
4. Identification of disease states: The files from step 6 are then merged to the reference files identified in step 5.
	1. ~~Pharmacy: Match the pharmacy history file with the NDC mapping file by NDC and assign new variables for RXC1-RXC24 for each person, with the values of 1 meaning the person had at least one NDC in the RXC during the reporting period, and 0 meaning they did not. The final layout for this pharmacy file will include person ID and RXC1-RXC24.~~

Diagnosis: Diagnoses are grouped and diagnosis variables ~~are coded done the same way as pharmacy, except that the variables are~~ DXC1-DXC92 are created and there is a requirement that there be either 1 corresponding diagnosis in SIDR/TED-I/DP-I or two corresponding diagnoses from CAPER/TED-N/DP-N that map to the same diagnosis category[[3]](#footnote-3) (includes 2 diagnoses that are the same) in order to receive a 1 value. If any records are flagged as DXC73, DXC74, or DXC75 (high risk neonate), check the patient’s age. If the patient’s age is greater than 0, set the flag to 0. The final layout for the diagnosis file will contain person ID, DXC1-DXC92.

1. Imposition of Hierarchies: For the diagnosis file from step 7b, a hierarchy is imposed to ensure proper risk score assignment. This hierarchy imposition only affects a small number of DX Categories. Apply the diagnosis hierarchy reference table to the file from7b. If a person has any of the diagnosis categories on any row of the diagnosis hierarchy table, only allow the person to have a 1 value for the category they qualify for with the highest DXC value. For example, if a beneficiary has a 1 for DXC 77, 78 and 79, then DXC 77 and DXC78 would be set to 0, while DXC79 would retain the value of 1. There are no hierarchies for the RXC categories.
2. Derive the High Cost User Flag as follows: if the 12-month weighted workload is > $100,000 and the FYTD weighted workload is > $100,000, set the High Cost User Flag to B; else if the 12-month weighted workload is > $100,000, set the High Cost User Flag to T; else set the High Cost User Flag to N.
3. Final layout: person ID, the rolling twelve month weighted workload, and the fiscal year to date weighted workload, High Cost User Flag, ~~RXC1-RXC24~~, DXC1-DXC92.
4. Mapping to LELG: Next, the file from step 9 is matched to the appropriate longitudinal eligibility files, keeping only records for people who were eligible at least one month between N and N-15, by person ID. Keep all records for people who appear in either the LELG or in the workload file (from step 9). If the person is in the LELG data, but not in the workload file, set the High Cost User Flag to N. Add the following variables:
	1. # Months in Prime during the reporting period (N-4 to N-15) - ACV values A, E, H, and J indicate enrollment in Prime
	2. # Months Eligible during the reporting period (N-4 to N-15)
	3. Overseas Enrollment Flag: Indicates the beneficiary had overseas enrollment in the reporting period (N-4 to N-15) – ACV values B and F indicate overseas enrollment
	4. 65 and older flag: Indicates the beneficiary was 65 or older by the beginning of month N
	5. Birth Flag: Indicates person was born during the reporting period (N-4 to N-15)
5. Merge the file from step 10 to the DEERS PBEN month being processed (month N). Keep person ID, enrollment DMISID, alternate care value, age group code, zip code, catchment area, PRISM area, MTF service area, gender, DoD occupation code, attached unit, assigned unit, beneficiary category, bencat common, sponsor service aggregate, Medicare eligibility code, marital status, PCM ID and derived death date from DEERS PBEN. (We can eliminate this step if we add death date to the LELG. Recommend we do that to simplify). Derive a flag to indicate whether or not the person died during the reporting period. The layout after the merge and flag derivation is person ID, the 6 flags noted above and ~~RXC1-RXC24~~, DXC1-DXC92.
6. Assignment of risk scores, done once for each truncation level[[4]](#footnote-4):
	1. Read in the file from step 11 and merge to weight reference file (rows 4 and later) to assign weights to each category that a person has a 1 value for, for each level of truncation.
	2. Sum the weights from each ~~RXC and~~ DXC (done separately, 4 times, for each truncation level). Add the intercept constant to all records (from row 1 of the reference tables). If the beneficiary is AD, add the constant from the AD row of the appropriate table. If the person was born during the reporting period, add the birth constant from the reference tables.
	3. Map the 4 associated scores in data elements with a naming convention that represents, “accrued risk category to date” and derive the risk categories by grouping values within ranges to be specified by HA[[5]](#footnote-5).
	4. For Prime patients only, if there is 9+ months of Prime enrollment, or if the person was born or died during the year AND was enrolled in PRIME at least one month during the year, then assign four new risk variables (one for each truncation level) with the name convention representing “Risk Score”, and fill it with the accrued risk score as calculated from step 12c. If none of these conditions are true, then assign the risk score by matching to the demographic table by age, gender and beneficiary category, and selecting the appropriate value. For all non-Prime, non-Active Duty patients, set the value to zero. Add a flag value to discern whether weight comes from clinical conditions or just the demographic model. Set the flag to C if the risk scores were assigned using the accrued risk, set the flag to D, if they were assigned using the demographic model, and set to N, if no risk score was assigned.
	5. Replace the PPS Lives data element everywhere it occurs in MDR and M2 with the risk values from truncation level “100K” and store the remaining 3 risk values in new fields.
7. Record Layout and Content

The MDR Risk Adjustment Key File is stored in a SAS dataset. Table 2 describes the content and business rules used to prepare the file.

**Table 2: MDR Risk Adjustment Key File Layout and Business Rules**

| **Data Element** | **SAS Name** | **Format** | **Source Element** | **Business Rule** |
| --- | --- | --- | --- | --- |
| DEERS Person ID | patuniq | $10  | All Sources | No transformation. This data element is the key merge field among all of the files. |
| Accrued Risk Range To Date – Untruncated | range\_trunc\_no | $1  | N/A | See Section VI |
| Accrued Risk Range to Date – 500K Truncation | range\_trunc\_500 | $1  | N/A | See Section VI |
| Accrued Risk Range to Date – 250K Truncation | range\_trunc\_250 | $1  | N/A | See Section VI |
| Accrued Risk Range to Date – 100K Truncation | range\_trunc\_100 | $1  | N/A | See Section VI |
| Prime Enrollee Risk Score – Untruncated | risk\_trunc\_no | 8.4 | N/A | See Section VI |
| Prime Enrollee Risk Score – 500K Truncation | risk\_trunc\_500 | 8.4 | N/A | See Section VI |
| Prime Enrollee Risk Score – 200K Truncation | risk\_trunc\_250 | 8.4 | N/A | See Section VI |
| Prime Enrollee Risk Score – 100K Truncation | risk\_trunc\_100 | 8.4 | N/A | See Section VI |
| Source of Risk | RISK\_SOURCE | $1  | N/A | See Section VI. |
| Weighted Workload Factor – Rolling 12 month | WW\_FAC\_12MO | 8.4 | N/A | See Section VI. |
| Weighted Workload Factor – FY to date | WW\_FAC\_FYTD | 8.4 | N/A | See Section VI. |
| High Cost User Flag | HIGH\_COST\_USER | $1  | N/A | See Section VI. |
| From DEERS VM6 |
| Enrollment MTF | enr\_dmisid | $4  | D\_MI\_PCM\_EDVSN\_DMIS\_ID | If ACV is A, E, H, J, G or L, or (the first three characters of the D\_MI\_PCM\_EDVSN\_DMIS\_ID are 019 and the ACV=U), set to D\_MI\_PCM\_EDVSN\_DMIS\_ID, else leave blank |
| Alternate Care Value | acv | $1  | MDR\_ACV | No transformation. |
| Age Group Code | agegrp | $1  | D\_AGE\_GROUP\_CD | No transformation. |
| Zip Code | zipcode | $5  | D\_ZIP\_CD | No transformation. |
| Catchment Area | catch | $4  | D\_CATCH\_AREA\_CD | No transformation. |
| PRISM Area | prism | $4  | D\_PRISM\_CD | No transformation. |
| MTF Service Area | mtfsa | $4  | D\_MTFSA\_CD | No transformation. |
| Gender | patsex | $1  | PN\_SEX\_CD | No transformation. |
| DoD Occupation Code | dodocc | $4  | DOD\_OCC\_CD | No transformation. |
| Attached Unit | attach\_uic | $8  | ATTCH\_UIC | No transformation. |
| Assigned Unit | assign\_uic | $8  | ASSGN\_UIC | No transformation. |
| Beneficiary Category | bencat | $3  | R\_BEN\_CAT\_CD | No transformation. |
| Bencat Common | comben | $1  | D\_COM\_BEN\_CAT\_CD | No transformation. |
| Sponsor Service, Aggregate | svcagg | $1  | D\_SPON\_BR\_SVC\_CD | No transformation. |
| Medicare Eligibility Code | medicare | $1  | D\_MDC\_ELIG\_CD | No transformation. |
| PCM ID | pcmid | $32 | D\_MI\_PCM\_ID | No transformation. |
| Marital Status | marital | $1  | MDR\_MARITAL\_AGG | No transformation. |
| From Longitudinal Eligibility |
| # Months Eligible | num\_months | N |   | Number of months the person is eligible in the reporting period. |
| # Months in Prime | num\_prime | N |   | Number of months the person has a Prime ACV  |
| Overseas Flag | overseas | $1  |   | Set to 1 if person was overseas at any time during the reporting period, else set to 0. If the person does not appear in the longitudinal eligibility data at all, set the flag to 9, for unknown. |
| 65 and Older Flag | age\_65 | $1  |   | Set to 1 if person is 65 or older at any time during the reporting period, else set to 0. If the person does not appear in the longitudinal eligibility data at all set the flag to Z, for unknown. |

The MDR Health Risk Category File is stored in a SAS Dataset. Table 3 describes the content and business rules used to prepare the file.

 **Table 3: MDR Health Risk Category File Layout and Business Rules**

| **Data Element** | **SAS Name** | **Format** | **Source Element** | **Business Rule** |
| --- | --- | --- | --- | --- |
| Person ID | patuniq | $10  | All Sources | No transformation |
| Diagnosis Category 1 – Diagnosis Category 92 | DXCn | $5  | N/A | 92 different values for diagnosis categories. See Section VI. |
| ~~Pharmacy Category 1 – Pharmacy Category 24~~ | ~~RXCn~~ | ~~$2~~  | ~~N/A~~ | ~~24 different values for pharmacy categories. See Section VI~~ |
| From DEERS VM6 |
| Enrollment MTF | enr\_dmisid | $4  | D\_MI\_PCM\_EDVSN\_DMIS\_ID | If ACV is A, E, H, J, G or L, or (the first three characters of the D\_MI\_PCM\_EDVSN\_DMIS\_ID are 019 and the ACV=U), set to D\_MI\_PCM\_EDVSN\_DMIS\_ID, else leave blank |
| Alternate Care Value | acv | $1  | MDR\_ACV | No transformation. |
| Age Group Code | agegrp | $1  | D\_AGE\_GROUP\_CD | No transformation. |
| Zip Code | zipcode | $5  | D\_ZIP\_CD | No transformation. |
| Catchment Area | catch | $4  | D\_CATCH\_AREA\_CD | No transformation. |
| PRISM Area | prism | $4  | D\_PRISM\_CD | No transformation. |
| MTF Service Area | mtfsa | $4  | D\_MTFSA\_CD | No transformation. |
| Gender | patsex | $1  | PN\_SEX\_CD | No transformation. |
| DoD Occupation Code | dodocc | $4  | DOD\_OCC\_CD | No transformation. |
| Attached Unit | attach\_uic | $8  | ATTCH\_UIC | No transformation. |
| Assigned Unit | assign\_uic | $8  | ASSGN\_UIC | No transformation. |
| Beneficiary Category | bencat | $3  | R\_BEN\_CAT\_CD | No transformation. |
| Bencat Common | comben | $1  | D\_COM\_BEN\_CAT\_CD | No transformation. |
| Sponsor Service, Aggregate | svcagg | $1  | D\_SPON\_BR\_SVC\_CD | No transformation. |
| Medicare Eligibility Code | medicare | $1  | D\_MDC\_ELIG\_CD | No transformation. |
| PCM ID | pcmid | $32  | D\_MI\_PCM\_ID | No transformation. |
| Marital Status | marital | $1  | MDR\_MARITAL\_AGG | No transformation. |
| From Longitudinal Eligibility |
| # Months Eligible | num\_months | N |   | Number of months the person is eligible in the reporting period. |
| # Months in Prime | num\_prime | N |   | Number of months the person has a Prime ACV |
| Overseas Flag | overseas | $1  |   | Set to 1 if person was overseas at any time during the reporting period, else set to 0. |
| 65 and Older Flag | age\_65 | $1  |   | Set to 1 if person is 65 or older at any time during the reporting period |
| DEERS Fiscal Month | deers\_fm | $2 |  | Set to DEERS fiscal month “n”, as noted in step 1. |

1. Refresh Frequency

Monthly, after the DEERS data has completed processing each month.

1. Quality Review Requirements

TBD

1. Data Marts

N/A

1. Special Outputs

N/A

Appendix A: Reference Files

There are 5 new reference files to be used in preparation of the MDR Risk Adjustment files. They are described in this appendix.

**Table 4: Diagnosis Code Table Layout**:

|  |  |  |
| --- | --- | --- |
| **Data Element** | **Note** | **Position in Format File** |
| Diagnosis Code | 5 characters, no decimals | Left Side |
| Mapping Category | Category Description, 65 characters | Right Side: 1-65 |
| Diagnosis Category | 5 characters | Right Side: 66-70 |

**~~Table 5: NDC Code Table Layout~~**~~:~~

|  |  |  |
| --- | --- | --- |
| **~~Data Element~~** | **~~Note~~** | **~~Position in Format File~~** |
| ~~NDC~~ | ~~11 characters, no decimals~~ | ~~Left Side~~ |
| ~~RX Cat Description~~ | ~~60 characters~~ | ~~Right Side: 1-60~~ |
| ~~RX Category~~  | ~~2 characters (i.e. 01, 20)~~ | ~~Right Side: 61-62~~ |
| ~~RXC~~ | ~~Make 6 characters, currently 5 char (values: RXC7, EXCL)~~ | ~~Right Side: 63-68~~ |

**Table 5: Weight Table Layout:** This is a combined table including both DXC weights and RXC weights. The 1st 3 rows of the table represent intercept values while the rest of the table contains the weights for each DXC and RXC.

|  |  |  |
| --- | --- | --- |
| **Data Element** | **Note** | **Position in Format File** |
| Category | 5 characters | Left Side |
| Description | 65 characters | Right Side: 1-65 |
| Untruncated Weight | 5th decimal place | Right Side: 66-72 |
| Weight – 500K CC | 5th decimal place | Right Side: 73-79 |
| Weight – 250K CC | 5th decimal place | Right Side: 80-86 |
| Weight – 100K CC | 5th decimal place | Right Side: 87-93 |

**Table 6: Demographic Weight Table Layout** – tab delimited

|  |  |
| --- | --- |
| **Data Element** | **Note** |
| Gender||Age | Gender and Age concatenated together |
| AD Untruncated Weight | 5th decimal place |
| ADD Untruncated Weight | 5th decimal place |
| NADD Untruncated Weight | 5th decimal place |
| AD Weight – 500k CC | 5th decimal place |
| ADD Weight – 500k CC | 5th decimal place |
| NADD Weight – 500k CC | 5th decimal place |
| AD Weight – 250k CC | 5th decimal place |
| ADD Weight – 250k CC | 5th decimal place |
| NADD Weight – 250k CC | 5th decimal place |
| AD Weight – 100k CC | 5th decimal place |
| ADD Weight – 100k CC | 5th decimal place |
| NADD Weight – 100k CC | 5th decimal place |

**Table 7: Diagnosis Hierarchy Table:**

|  |  |  |
| --- | --- | --- |
| **Data Element** | **Note** | **Position in Format File** |
| Hierarchy Name | 42 characters | Left Side |
| HCAT1 | 5 characters | Right Side: 1-5 |
| HCAT2 | 5 characters | Right Side: 6-10 |
| HCAT2 | 5 characters | Right Side: 11-15 |
| HCAT4 | 5 characters | Right Side: 16-20 |
| HCAT5 | 5 characters | Right Side: 21-25 |
| HCAT6 | 5 characters | Right Side: 26-30 |

1. Use the begin date if there is more than one date on a record. [↑](#footnote-ref-1)
2. 1st 5 characters of the diagnosis code with no decimal places. [↑](#footnote-ref-2)
3. The diagnosis codes themselves don’t have to be the same for this rule; they just have to map to the same DXC. [↑](#footnote-ref-3)
4. Truncation refers varying levels of “catastrophic cap” assignment. [↑](#footnote-ref-4)
5. It is possible that a decision will be made that not all 4 levels of truncation need to be calculated. [↑](#footnote-ref-5)