**6 August 2014**

Health Risk File for the MHS Mart (M2)

(Version 1.00.01)

Current Specification

**Revision History**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Version** | **Date** | **Para/Tbl/Fig** | **Originator** | **Description of Change** |
| 1.00.00 | 06/25/2014 | * Initial | W. Funk | * Initial version |
| 1.00.01 | 8/6/2014 | * Table 1 * Table 2 | W. Funk | * Changed a label name * Added “Record Count” |

# M2 Health Risk File

1. Source: The M2 Health Risk file is provided to M2 by the MDR by merging the MDR Health Risk File and the MDR Risk Adjustment File.
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 Health Risk file contains one record for every person treated in the MHS in a recent rolling 12 month period.
4. Organization and Batching: Each month, full replacement fiscal year files are provided.
5. Frequency of Processing: Refreshes are monthly.
6. Filters and Field Transformations: To develop the M2 Health Risk File, the MDR will merge the fiscal year MDR Health Risk file to the MDR Risk Adjustment file by person ID, retaining only records that are in the Health Risk File and keeping fields noted in Table 1. After that, records for the specified year are provided to M2, and no additional filters are applied.
7. Update Process: Initially, fiscal years XX and forward will be provided. The update processor should be built to handle the receipt of new fiscal year batches at any time. The first time a fiscal year batch is provided, records are simply loaded, with field transformations as indicated in Tables 1 and 2. Thereafter, whenever a fiscal year is provided, the old data is discarded and replaced with the new data.
8. MDR Feed Layout to M2. Table 1 contains the layout of the M2 Health Risk File feed.

**Table 1: File Layout and Transformation Rules to Prepare the Feed to go to M2 Health Risk File**

| **M2 Field Name** | **Length** | **Source Element Name** | **Source File Name** | **Business Rule** |
| --- | --- | --- | --- | --- |
| FY | $4 | N/A | N/A | Taken from File Name of M2 Risk Feed |
| Person ID | $10 | PATUNIQ | Key Variable | Only available in the restricted universe. |
| Number of Months Eligible | 3 | NUM\_MONTHS | HR | No transformation |
| Number of Months in Prime | 3 | NUM\_PRIME | HR | No transformation |
| Overseas Flag | $1 | OVERSEAS | HR | No transformation |
| Aged 65+ Flag | $1 | AGE\_65 | HR | No transformation |
| High Cost User Flag | $1 | HIGH\_COST\_USER | RA | No transformation |
| Source of Risk Score | $1 | RISK\_SOURCE | RA | No transformation |
| Risk Score, No Truncation | 8.4 | RISK\_TRUNC\_NO | RA | No transformation |
| Risk Score, 100K Truncation | 8.4 | RISK\_TRUNC\_100 | RA | No transformation |
| Accrued Risk to Date | 8.4 | RANGE\_TRUNC\_NO | RA | No transformation |
| Arthropathy | $1 | DXC1 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Bone/Joint/Muscle Infections/Necrosis | $1 | DXC2 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Central Nervous System (Low) | $1 | DXC3 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Central Nervous System (High) | $1 | DXC4 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| CP, Hemorrhage, Other Paralytic Syn | $1 | DXC5 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Cerebrovascular Disease | $1 | DXC6 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Chronic Ulcer of Skin, Except Decubitus | $1 | DXC7 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Skin & Subcutaneous Tissue (Low) | $1 | DXC8 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Skin & Subcutaneous Tissue (Med) | $1 | DXC9 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Skin & Subcutaneous Tissue (High) | $1 | DXC10 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Circulatory/Cardiovascular (Low) | $1 | DXC11 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Circulatory/Cardiovascular (Med) | $1 | DXC12 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Circulatory/Cardiovascular (High) | $1 | DXC13 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Circulatory/Cardiovascular (Very High) | $1 | DXC14 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Congestive Heart Failure | $1 | DXC15 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Vascular Disease | $1 | DXC16 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Cystic Fibrosis | $1 | DXC17 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Diabetes | $1 | DXC18 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Renal Failure (Low) | $1 | DXC19 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Renal Failure (Med) | $1 | DXC20 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Renal Failure (High) | $1 | DXC21 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Dialysis Status | $1 | DXC22 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Diseases of the Blood (Low) | $1 | DXC23 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Diseases of the Blood (Med) | $1 | DXC24 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Diseases of the Blood (High) | $1 | DXC25 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Diseases of the Breast | $1 | DXC26 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Diseases of the Ear/Mastoid Process | $1 | DXC27 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Diseases of the Genitourinary System | $1 | DXC28 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Disorders of Immunity | $1 | DXC29 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Disorders of the Eye & Adnexa | $1 | DXC30 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Dorsopathies (Low) | $1 | DXC31 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Dorsopathies (High) | $1 | DXC32 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Endocrine, Metabolic, Immune Dis (Low) | $1 | DXC33 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Endocrine, Metabolic,Immune Dis (High) | $1 | DXC34 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Seizure Disorders and Convulsions | $1 | DXC35 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Fracture/Dislocation (Low) | $1 | DXC36 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Fracture/Dislocation (Med) | $1 | DXC37 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Fracture/Dislocation (High) | $1 | DXC38 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Other Injury (Low) | $1 | DXC39 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Other Injury (Med) | $1 | DXC40 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Other Injury (High) | $1 | DXC41 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Vert Fractures, Spinal Cord Dis/Injury | $1 | DXC42 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Traumatic Brain Injury (Low) | $1 | DXC43 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Traumatic Brain Injury (High) | $1 | DXC44 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| GI/Infectious/Parasitic (Low) | $1 | DXC45 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| GI/Infectious/Parasitic (Med) | $1 | DXC46 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| GI/Infectious/Parasitic (High) | $1 | DXC47 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Inflammatory Bowel Disease | $1 | DXC48 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Neoplasm/Cancer (Low) | $1 | DXC49 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Neoplasm/Cancer (Med) | $1 | DXC50 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Neoplasm/Cancer (High) | $1 | DXC51 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Neoplasm/Cancer (Very High) | $1 | DXC52 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Maj CC of Medical Care and Trauma | $1 | DXC53 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Affective Psychoses | $1 | DXC54 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Other Non-Psychotic Depressive Disorders | $1 | DXC55 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Anxiety-Related Disorders | $1 | DXC56 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Other Neurotic Disorders | $1 | DXC57 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Adjustment Disorders | $1 | DXC58 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| PTSD | $1 | DXC59 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Acute Reaction to Stress | $1 | DXC60 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Substance Induced Mental Disorders | $1 | DXC61 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Substance Dependence | $1 | DXC62 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Substance Abuse | $1 | DXC63 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Psychotic Disorders of Childhood | $1 | DXC64 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Non-Psychotic Disorders of Childhood | $1 | DXC65 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Schizophrenic Disorder | $1 | DXC66 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Other Psychotic Disorders | $1 | DXC67 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Personality Disorders | $1 | DXC68 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Disturbance of Conduct | $1 | DXC69 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Other Non-Psychotic Disorders | $1 | DXC70 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Major Organ Transplant Status | $1 | DXC71 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Multiple Sclerosis | $1 | DXC72 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| High-Risk Neonate (Low) | $1 | DXC73 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| High-Risk Neonate (Med) | $1 | DXC74 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| High-Risk Neonate (High) | $1 | DXC75 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Osteoarthrosis | $1 | DXC76 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Other Congenital Anomalies | $1 | DXC77 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Other Digestive System Diseases | $1 | DXC78 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Oth Musculoskel Sys & Connective Tissue | $1 | DXC79 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Other Mycoses | $1 | DXC80 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Polyneuropathy | $1 | DXC81 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Pregnancy (Low) | $1 | DXC82 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Pregnancy (High) | $1 | DXC83 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Protein-Calorie Malnutrition | $1 | DXC84 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Pulmonary/Respiratory (Low) | $1 | DXC85 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Pulmonary/Respiratory (Med) | $1 | DXC86 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Pulmonary/Respiratory (High) | $1 | DXC87 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Asthma | $1 | DXC88 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Quadriplegia, Other Extensive Paralysis | $1 | DXC89 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Respirator Arrest, Dependence/Trach Stat | $1 | DXC90 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| RA /Inflammatory Connective Tissue Dis | $1 | DXC91 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Septicemia/Shock | $1 | DXC92 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Anti-coagulants Rx | $1 | RXC1 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Cardiac (High) Rx | $1 | RXC2 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| CMV Retinitis Rx | $1 | RXC3 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Cystic Fibrosis Rx | $1 | RXC4 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Growth Hormone Rx | $1 | RXC5 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Hepatitis Rx | $1 | RXC6 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Herpes Rx | $1 | RXC7 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Insomnia Rx | $1 | RXC8 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Iron Deficiency Rx | $1 | RXC9 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Leukocyte Growth Factor Rx | $1 | RXC10 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Liver Disease Rx | $1 | RXC11 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Malignancies Rx | $1 | RXC12 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Neurogenic Bladder Rx | $1 | RXC13 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Other Central Nervous System Rx | $1 | RXC14 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Parkinsons / Tremor Rx | $1 | RXC15 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Protein Kinase Inhibitors Rx | $1 | RXC16 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Psychotic Illness / Bipolar Rx | $1 | RXC17 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Quinolone Antimicrobial Rx | $1 | RXC18 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Recombinant Human Interferon Beta Rx | $1 | RXC19 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Replacement Solution Rx | $1 | RXC20 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Seizure Disorders Rx | $1 | RXC21 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Serotonin-3 Receptor Antagonist Rx | $1 | RXC22 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Transplant Rx | $1 | RXC23 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |
| Tuberculosis Rx | $1 | RXC24 | HR | In MDR, if 1 set to Y, else if 0 set to "N", else no transformation. No transformation in M2 |

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** |
| --- | --- |
| Psuedo Person ID | Encrypted version of person ID |
| Record Count | Count of rows retrieved in a query |

1. Quality Review

* Record counts should match those contained in the transmittal letter representing each feed
* 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
* The frequencies of the disease/rx flag variables should match those in MDR by fiscal year and disease / rx categories.

1. File Location

Eligibility / Health Risk /

1. Special Outputs: N/A