MedRIC

500 AIRPORT BLVD, SUITE 365
BURLINGAME, CA 94010
(650) 558-8310 | MEDRIC@ACUMENLLC.COM

MEDRIC NOTIFICATION

Change Log for 2013 – 2016 MedRIC Research Files

February 2019

SENSITIVE INFORMATION – DO NOT REDISTRIBUTE

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1 Introduction

This *MedRIC Notification: Change Log for 2013 – 2016 MedRIC Research Files* identifies changes to Medicare and/or Medicaid variables in MedRIC's Phase 22 research files as a result of:

1. the Centers for Medicare & Medicaid Services (CMS) modifying the variable logic and/or values of CMS data;
2. non-CMS sources of CMS data (e.g., the Department of Veteran Affairs (VA), which owns the drug characteristics information contained in MedRIC's Part D summary files) modifying the variable logic and/or values of their source data; and/or
3. MedRIC's processing and/or restructuring CMS data, so that these data are easier for researchers to understand and use.

Please note that, in addition to these major sources of data changes, CMS's final action policy for claims as well as the evolving participants in the Health and Retirement Study (HRS)[1] affect not only the claims information for a participant over time but also the overall participant statistics between file versions (for more information on MedRIC file versions, refer to Appendix D and Appendix E).

[1] HRS adds new survey participants and removes those that die as part of its study maintenance protocols.

1.1 About the Two Types of Data Changes Documented in this *Log*

This *Log* specifies the following two types of data changes:

1 Substantial modifications to MedRIC's source data that CMS and/or non-CMS sources of CMS data[2] have made to CMS data; and

2 Substantial data processing and/or restructuring modifications to CMS source data that MedRIC has made to CMS data.

Section 1.1.1 contains a definition of *substantial modification*, while Sections 1.1.2 - 1.1.3 contain detailed description of each of the types of changes listed above.

1.1.1 SUBSTANTIAL MODIFICATION DEFINITION

A *substantial modification* to CMS source data is a modification that:

- Impacts all or almost all values for a variable or array; and/or
- Impacts a variable or array that our data experts deem likely to be frequently used, even if the change does not affect a substantial portion of the variable's or array's values.

[2] A non-CMS source of CMS data is any entity whose data is included within or impacts CMS data.

Our definition of "substantial modification" does not include any statistically significant thresholds because we do not have sufficient information on the exact variables of interest to our research community that would enable us to reliably define significance or a threshold.

1.1.2 CMS AND NON-CMS SOURCES OF MODIFICATIONS

CMS and non-CMS sources of CMS data make substantial modifications to CMS data for two reasons: (1) to account for new or revised data protocols and rules; and/or (2) to fix data anomalies.

DOCUMENTATION PRACTICES FOR CMS DATA CHANGES PRECIPITATED BY CMS AND/OR NON-CMS SOURCES OF CMS DATA:

As MedRIC is neither the primary source of CMS data changes (rather, CMS is) nor under contract with CMS to produce CMS data documentation, we have limited our reporting of CMS' and CMS contributors' data changes to those that **substantially**[3] impact research.

For those changes that are neither substantial nor inconsequential, we have highlighted the most prominent in Appendix A, with the caveat that Appendix A is **not** a comprehensive list of CMS- and non-CMS sources-initiated data changes. For more comprehensive information,

[3] Refer to Section 1.1.1 for a definition.

we strongly recommend that researchers periodically consult the Research Data Assistant Center (ResDAC) website for alerts about data changes.

1.1.3 DATA PROCESSING AND/OR RESTRUCTURING MODIFICATIONS TO MEDRIC'S SOURCE DATA MADE BY MEDRIC

Our Center makes the following three types of modifications to CMS source data.

1. As a service to our research community, we synchronize CMS's various layouts, or "versions," of Parts A & B data to the latest version.
2. We develop research-oriented variables that aggregate CMS data sources into annual, quarterly, and/or interview gap periods.
3. On rare occasions, we revise variable values to improve intelligibility and/or correct known anomalies to CMS data that CMS and/or non-CMS sources of CMS data have not yet corrected.

Sections 1.1.3.1 – 1.1.3.3 describe each of these modifications in greater detail.

1.1.3.1 MEDRIC SYNCHRONIZATION OF CMS'S PARTS A &B DATA LAYOUTS

Over the past decade, CMS has released Parts A & B claims data in four layouts or "versions"—namely, H, I, J, and K[4]—to introduce new and modify existing claims variables (including altering coding values). Though these versions are needed to capture ongoing changes to CMS data, they make analyzing CMS data across time challenging for researchers, as researchers must:

1 comprehend how these versions impact previous data structures and values—including reconciling data values that unexpectedly and randomly change across historic versions; and

2 write additional code that accounts for variations in these structures and values.

To help researchers bypass these challenges, our MedRIC data processing staff synchronize CMS's historic data versions to the latest data version. For example, the latest set of our HRS-linked CMS files (i.e., files through 2016) align all historic versions—that is, Version H, I, and J data—to the Version K layout.

We achieve this synchronization by creating and maintaining synchronization programs for each version of CMS data, meaning that our team has a "Version H to Version K" synchronization program for Version H data, a "Version I to Version K" synchronization program for Version I data, and so on. Each of these version synchronization programs contains a set of substring programs that perform Version-specific synchronization tasks.

[4] For a mapping of CMS data versions to file years, refer to Appendix A CMS File Types: Versions & Years Matrix.

DOCUMENTATION PRACTICES FOR MEDRIC SYNCHRONIZATION OF CMS'S PARTS A & B DATA LAYOUTS:	Because synchronizing CMS data versions can impact hundreds, if not thousands of variables, we only report synchronization changes if those changes could have a **substantial**[5] impact on research.

1.1.3.2 MEDRIC SUMMARY VARIABLES

For all MedRIC-created summary files, our data experts devise and develop summary variables—that is, variables that aggregate variable values across a given time period (i.e., annual, quarterly, and interview gap).

DOCUMENTATION PRACTICES FOR MEDRIC SUMMARY VARAIBLES:	Because our data dictionaries define research file contents in detail and contain information on changes we make to a dataset, we will only report **substantial** changes in this *Log* when our methodology changes.

[5] Refer to Section 1.1.1 for a definition.

1.1.3.3 MEDRIC REVISIONS TO CMS DATA TO IMPROVE INTELLIGIBILITY AND/OR CORRECT A KNOWN DATA ANOMALY

MedRIC only modifies raw CMS data to either (1) improve the intelligibility of data (e.g., synchronizing data versions); and/or (2) correct a known data anomaly that would have a substantial impact on research activities.

DOCUMENTATION PRACTICES FOR MEDRIC REVISIONS TO CMS SOURCE DATA:	Because our data dictionaries define research file contents in detail and contain information on changes we make to a dataset, we will only report **substantial** changes in this *Log* when our methodology changes.

1.2 About the Changes Listed in this Log

Table 1 below summarizes the data changes specified in this *Log*.

Table 1. List of Changes

ID	CHANGE TITLE	CHANGE CATEGORY	AFFECTED CMS FILE TYPE(S)	AFFECTED FILE(S): VERSION	AFFECTED FILE(S): RELEASE VERSION
C1	MedRIC Switch from Character Dates to Numeric Dates in Parts A & B Files	MedRIC Change to Data Processing Method	ALL	Phase 22	22.0
C2	Switch from Denominator (DN) to Master Beneficiary Summary File (MBSF) – Base Segment Changes HRS Survey Participants' Ages	CMS Modification to MedRIC's Data Authorization	MBSF – Base Segment	Phase 22	22.0
C3	MedRIC Synchronization of CMS Parts A & B Data Versions Changes Empty NDCQTY Values to NDCQTY Values of Zero	CMS Modification to CMS Data Values MedRIC Synchronization of CMS Data Layouts	Parts A & B Claims	Phase 21	21.2

ID	CHANGE TITLE	CHANGE CATEGORY	AFFECTED CMS FILE TYPE(S)	AFFECTED FILE(S): VERSION	AFFECTED FILE(S): RELEASE VERSION
C4	Chronic Condition Groups (CCGs) No Longer Available for Claims based on International Classification of Diseases (ICD)-10 Diagnoses	CMS Change to RDDC_CCG Source Data	Parts A & B Summary Files	Phase 22	22.0
C5	Updates to Drug Code Mappings in Part D Summary Files	Non-CMS Organization Updates its Drug Class Specifications	Part D Summary Files	Phase 22	22.0
C6	Chronic Condition Warehouse (CCW) Chronic Conditions Algorithm Updates	CCW Modification to Chronic Condition Specification Algorithm	Parts A & B Summary Files	Phase 22	22.0

1.3 About the Two Support Groups for Data Changes to MedRIC Research Files

There are two support groups for data changes to MedRIC research files, as follows:

1 ResDAC for all changes to CMS data that CMS and/or non-CMS sources of CMS data have made; and

2 MedRIC Support for all changes to CMS data that MedRIC has made.

Sections 1.3.1 and 1.3.2 below contain contact information for each of these groups.

1.3.1 RESDAC CONTACT INFORMATION

If you have questions about CMS- and/or non-CMS-initiated changes to CMS data, please contact ResDAC.

HOURS:	Monday – Friday, 8:00 AM – 4:00 PM CT
EMAIL:	ResDAC@umn.edu
PHONE:	(888) 973-7322

1.3.2 MEDRIC CONTACT INFORMATION

If you have any questions about MedRIC-generated changes to CMS data, please contact MedRIC Support.

HOURS:	Monday – Friday, 9:00 AM – 6:00 PM PT
EMAIL:	MedRIC@AcumenLLC.com
PHONE:	(650) 558-8310

1.4 About this Document

There are six sections and five appendices in this document.

Section 1.4.1 describes the structure of every document section, while Section 1.4.2 summarizes the contents of each appendix.

1.4.1 STRUCTURE OF SIX DOCUMENT SECTIONS

Each document section consists of a:

- description of the change;
- **Change Example** sub-section, which provides table-based examples of the change;
- **Affected Data** sub-section, which specifies the exact variables affected by the change;
- **Impact Rating** *&* **Rating Justification**, which contains our assessment of the impact of the change as well as our justification for our assessment;
- **Change Justification** sub-section, which explains why CMS, another organization, or MedRIC implemented the change; and

- **Additional Documentation** sub-section, which identifies any additional reference materials available to help you understand the change.

1.4.2 CONTENT OF FIVE APPENDICES

This document also includes the following five appendices:

- Appendix A Non-Substantial Changes to CMS Data Precipitated by CMS and Non-CMS Sources of CMS Data, which contains a high-level list of non-substantial changes to CMS data that CMS and/or non-CMS organizations have made to CMS data.

  > **Note that this list of changes is NOT comprehensive.**

- Appendix B CMS Meta-Data Resources, which contains a list of meta-data resources for CMS data by CMS file type.

- Appendix C CMS File Types: Versions & Years Matrix, which specifies each version of CMS Parts A & B files by file type and year(s).

- Appendix D MedRIC File Version Information, which describes MedRIC's file version policy.

- Appendix E Dataset Releases, which lists each release of MedRIC's data inventory to help you determine whether a change impacts your MedRIC-supplied data files.

C1 MedRIC Switch from Character Dates to Numeric Dates in Parts A & B Files

Based on specifications from the Health and Retirement Study (HRS), MedRIC has historically processed Parts A & B file dates (e.g., service dates) in a character, as opposed to numeric, format. Though the character format has provided researchers with clearer information on invalid date values, we recently determined that the number of invalid date values (on average across all Parts A & B file types, 0.0092% dates have invalid values) is out of proportion with the level of effort required to process all dates in a character format. To lower processing costs and better match CMS's policy of processing dates in a numeric format, we have **NOT** converted numeric dates to character dates in Phase 22 files, but, rather, retained CMS's numeric formatting method[6].

> **Because this change may have a substantial impact on researchers' existing analytic programs, we have developed code that convert numeric dates into a character format and provided this code in Section C1.3 below.**

CHANGE CATEGORY:	MedRIC Change to Data Processing Method

[6] We are currently working on converting character dates to numeric dates in the Long-Term Care Minimum Data Set (MDS) and Home Health Outcome and Assessment Information Set (OASIS).

VERSION OF MEDRIC FILES AFFECTED:	Phase 22 (Does This Change Affect Me?)

C1.1 Change Examples

Table 2 and Table 3 below contain examples of (1) the Home Health Agency Care Start Date (HHSTRTDT) date variable in Phase 21 files; and (2) the same HHSTRTDT date variable in Phase 22 Files.

Table 2. Example of HHSTRTDT Date Variable in Phase 21 Files

HHSTRTDT VARIABLE
01/00/2016

Table 3. Example of HHSTRTDT Date Variable in Phase 22 Files

HHSTRTDT VARIABLE
.

C1.2 Affected Data

Table 4 below specifies the CMS files, years, and variables affected by the date format change as well as quantifies the percentage of records affected by the change.

Table 4. Change Impact: Switch from Character to Numeric Date Format

CMS FILE TYPE	CMS FILE YEARS	CMS VARIABLES	NO OF INVALID DATES / TOTAL NUMBER OF RECORDS	AVERAGE % OF RECORDS WHOSE INVALID DATES
Parts A & B Files	1991 - 2012	*All date variables*	745/8,073,677	0% - 0.01%

C1.3 Impact Rating & Rating Justification

RATING:	High

RATING JUSTIFICATION:	We based our High rating on the fact that date formatting likely affects a large portion of our clients' research interests and may therefore require researchers to modify existing analytic programs.

C1.4 Change Justification

We have made this processing change to lower production costs and align MedRIC's datasets with CMS practices.

C1.5 Additional Documentation

To help researchers manage the formatting change, our data experts have created two snippets of code (below) that convert numeric dates into character formats: one for non-MedPAR (MP) Parts A & B data files (i.e., Carrier (PB), Denominator (DN), Durable Medical Equipment (DM), Home Health (HH), Hospice (HS), Inpatient (IP), Outpatient (OP), Skilled Nursing Facility (SN), which feature Gregorian dates), and one for the MP file (as the file features Julian dates).

DATE CONVERSION CODE FOR NON-MEDPAR PARTS A & B FILES	`Date_Variable_char = Put(Date_Variable, YYMMDDN8.);`

DATE CONVERSION CODE FOR MEDPAR FILE	`Length Date_Variable_julian $7;`
	
	`Date_Variable_julian = Juldate7(Date_Variable);`

Use this code to convert numeric dates on Phase 22 data files into character ones.

C2 Switch from Denominator (DN) to Master Beneficiary Summary File (MBSF) – Base Segment Changes HRS Survey Participants' Ages

For Phase 22 files, CMS switched MedRIC from the Denominator (DN) file for Medicare enrollment to the MBSF – Base segment. Though this switch offers new enrollment variables to researchers (e.g., Part C enrollment values), the MBSF – Base segment uses a different reference date to calculate age than the DN. As a result, the MBSF – Base segment value for age, AGE_AT_END_REF_YR (MBSF Varname), tends to be one year greater than the DN's value for age, AGE (DN Varname)[7].

CHANGE TYPE(S):	CMS Modification to MedRIC's Data Authorization
VERSION OF MEDRIC FILES AFFECTED:	**Phase 22 (Does This Change Affect Me?)**

C2.1 Change Examples

Table 5 and Table 6 below contain examples of (1) the AGE variable in the Denominator file; and (2) the AGE_AT_END_REF_YR variable in the MBSF - Base segment.

[7] In addition, we identified a small number of HRS participants in the MBSF – Base Segment who weren't in the DN, as well as a small number of HRS participants in the DN who weren't in the MBSF – Base Segment.

Table 5. Example of Age Values in DN Files

BID_HRS_22	BENE_DOB	AGE
H141234567	19AUG1945	67

Table 6. Example of Age Values in MBSF – Base Segment Files

BID_HRS_22	BENE_BIRTH_DT	AGE_AT_END_REF_YR
H141234567	19AUG1945	68

C2.2 Affected Data

Table 10 below specifies the CMS files, years, and variables affected by the DN to MBSF change as well as quantifies the percentage of HRS participants whose ages are one year greater than in the DN.

Table 7. Change Impact: Age Variable

CMS FILE TYPE(S)	CMS FILE YEARS	CMS DN OR MBSF VARNAME	NO. OF HRS PARTICIPANTS IN BOTH DN AND MBSF	% OF PARTICIPANTS WHERE MBSF RECORDS AGE AS ONE YEAR OLDER THAN THE DN
DN vs MBSF	2013	AGE (DN) vs AGE_AT_END_REF_YR (MBSF)	13,119	95%
DN vs MBSF	2014	AGE (DN) vs AGE_AT_END_REF_YR (MBSF)	12,856	95%
DN vs MBSF	2015	AGE (DN) vs AGE_AT_END_REF_YR (MBSF)	12,544	95%

C2.3 Impact Rating & Rating Justification

RATING:	**Low**
RATING JUSTIFICATION:	We based our Low rating on the fact that researchers can use the Date of Birth on the MBSF – Base segment and a reference date of their choosing to calculate the DN value.

C2.4 Change Justification

For 2013 CMS data and beyond, CMS shifted MedRIC from the DN file to the MBSF – Base segment, which contains comparable information to the DN but adds in Medicare Advantage (Part C) enrollment and Prescription Drug Program (Part D) plan enrollment information. This Part C/D information offers researchers more comprehensive enrollment information when linked to the HRS cohort.

However, CMS's methodology for calculating age in the DN differs from its method of calculating age in the MBSF - Base segment. Because CMS has still authorized MedRIC to release 1991 - 2012 DN files, our data inventory now features discrepant age values in the 1991 - 2012 DN and 2013 - 2015 MBSF – Base segment files.

C2.5 Additional Documentation

In addition to our guidance for using the Date of Birth on the MBSF – Base segment and a reference date of their choosing to calculate the DN value, our data team has developed the "MedRIC DN to MBSF Crosswalk," which maps DN and MBSF variables and which is available on the File Library page of our public website, https://medric.info/file_library.html.

C3 MedRIC Synchronization of CMS Parts A & B Data Versions Changes Empty NDCQTY Values to NDCQTY Values of Zero

As explained in Section 1.2, MedRIC synchronizes CMS's historic data versions (i.e., H, I, and J) to the latest data version (i.e., K). As a result of this synchronization, our 1991 - 2010 Parts A & B research files contain columns for the Revenue Center (RVCNTR) National Drug Code (NDC) quantity (NDCQTY) array, even though, prior to 2011, CMS source data does **NOT** contain any RVCNTR NDC quantities for HRS survey participants—meaning that all columns for the NDCQTY array have empty cells.

However, starting with late 2010 claims, CMS source data DOES contain RVCNTR NDC quantities for some HRS survey participants, and specifies these quantities according to the following logic.

- Whenever RVCNTR values exist for a beneficiary, CMS specifies non-existent NDC quantities as zeros.
- Whenever RVCNTR values do NOT exist for a beneficiary, CMS specifies non-existent NDC quantities as empty.

To match this CMS denotation policy, we have revised 1991 - 2010 Revenue Center NDC quantities from empty to zeros in our Phase 22 files for those HRS survey participants who have a corresponding RVCNTR value.

CHANGE TYPE(S):	CMS Modification to CMS Data Values MedRIC Synchronization of CMS Data Layouts
VERSION OF MEDRIC FILES AFFECTED:	**Phase 22 (Does This Change Affect Me?)**

C3.1 Change Examples

Table 8 and Table 9 below contain examples of (1) the notation for non-existent NDCQTY values in Phase 21 files; and (2) the notation for non-existent NDCQTY values in Phase 22 files respectively.

Table 8. Example of Notation for Non-Existent NDCQTY Values in Phase 21 Files

RVCNTR01	RVCNTR02	NDCQTY01	NDCQTY02
ABCD		.	.

Table 9. Example of Notation for Non-Existent NDCQTY Values in Phase 22 Files

RVCNTR01	RVCNTR02	NDCQTY01	NDCQTY02
ABCD		0	.

C3.2 Affected Data

Table 10 below specifies the CMS files, years, and variables affected by the empty to zero NDCQTY change as well as quantifies the percentage of empty NDCQTY code values changed to zero relative to the total number of records for NDCQTY codes.

Table 10. Change Impact: NDCQTY Variable

CMS FILE TYPE	CMS FILE YEARS	CMS VARNAME/ ARRAY	% OF RECORDS CHANGED FROM EMPTY TO ZERO COMPARED TO TOTAL RECORDS
Parts A & B - HH	1991 - 2010	NDCQTY01-NDCQTY45	100%

CMS FILE TYPE	CMS FILE YEARS	CMS VARNAME/ ARRAY	% OF RECORDS CHANGED FROM EMPTY TO ZERO COMPARED TO TOTAL RECORDS
Parts A & B - HS	1991 - 2010	NDCQTY01-NDCQTY45	100%
Parts A & B - IP	1991 - 2010	NDCQTY01-NDCQTY45	90% - 100%
Parts A & B - OP	1991 - 2010	NDCQTY01-NDCQTY45	90% - 100%
Parts A & B - SN	1991 - 2010	NDCQTY01-NDCQTY45	90% - 100%

C3.3 Impact Rating & Rating Justification

RATING:	**Insignificant**
RATING JUSTIFICATION:	We based our Insignificant rating on the fact that the absence of any value for NDC quantities prior to 2011 is equivalent to a zero value for those quantities starting in 2011.

C3.4 Change Justification

As a service to NIH researchers, MedRIC not only implements all CMS modifications to its claims data but also synchronizes all CMS changes across all historic years of data—meaning that if CMS changes its method of handling a variable in 2013, we apply that variable change to all years prior to 2013. In the case of empty NDCQTY values, synchronizing all versions of CMS data to the Version J layout entailed converting all empty values for 1991 - 2009 Revenue Center NDC quantities—as well as those 2010 Revenue Center NDC quantities processed by December 2010—to zeros.

In performing this synchronization, we aim to ensure that NIH researchers (1) do NOT need to create analytic programs that are specific to each version of CMS data; and (2) can correlate different variable and trailer-array values across time.

C3.5 Additional Documentation

N/A

C4 Chronic Condition Groups (CCGs) No Longer Available for Claims based on International Classification of Diseases (ICD)-10 Diagnoses

Before CMS converted from ICD-9 to ICD-10 coding in October 2015, MedRIC used CMS's risk model for translating ICD-9 diagnoses into chronic conditions (CCs) to develop Research Data Distribution Center (RDDC)_Chronic Condition Groups (CCGs).

With CMS's conversion to ICD-10 coding practices (i.e., for claims dated October 2015 through December 2015), CMS substantially altered the underlying logic for its risk model and thus CCs, making it impossible for MedRIC to develop ICD-10 RDDC_CCGs consistent with ICD-9 RDDC_CCGs. Further, because MedRIC synchronizes historic CMS data versions with the latest version of CMS data, synchronizing RDDC_CCGs based on ICD-10 logic through all historic data versions would nullify all previous RDDC_CCGs.

For this reason, we have not produced RDDC_CCGs for:

1. the 2015 Beneficiary Annual Summary File (BASF), as the missing RDDC_CCGs in the last quarter of 2015 blocked us from creating annual RDDC_CCGs for the 2015 year;
2. that last quarter of the Beneficiary Quarterly Summary File (BQSF), as the missing RDDC_CCGs in the last quarter of 2015 blocked us from creating the final quarter's RDDC_CCGs; and
3. the 2014 - 2015 Beneficiary Interview Gap File (BISF), as the missing RDDC_CCGs in the last quarter of 2015 blocked us from creating a two-year summary of the RDDC_CCGs.

Further, as a result of the ICD-10 coding conversion, we will no longer be able to produce RDDC_CCGs for 2016 and beyond Medicare files.

CHANGE CATEGORY:	CMS Change to RDDC_CCG Source Data
VERSION OF MEDRIC FILES AFFECTED:	**Phase 22 (Does This Change Affect Me?)**

C4.1 Change Examples

Table 11 and Table 12 below contain examples of ICD-9 and ICD-10 RDDC_CCG values respectively.

Table 11. Example of ICD-9 RDDC_CCG Value

RDDC_CCG_1	RDDC_CCG_2
0	1

Table 12. Example of ICD-10 RDDC_CCG Value

RDDC_CCG_1	RDDC_CCG_2
Missing	Missing

C4.2 Affected Data

Table 13 below specifies the CMS files, years, and variables affected by the ICD-10 coding change as well as quantifies the percentage of missing RDDC_CCG values relative to the total number of records for RDDC_CCGs[8].

Table 13. Change Impact: Missing RDDC_CCG Codes

CMS FILE TYPE	CMS FILE YEARS	CMS VARNAME/ ARRAY	% OF MISSING RDDC_CCG CODES COMPARED TO TOTAL RECORDS
Parts A & B Annual Summary Files	1991 - 2016	RDDC_CCG_1-RDDC_CCG_30	5% - 10%
Parts A & B Quarterly Summary Files	1991 - 2016	RDDC_CCG_1-RDDC_CCG_30	< 5%

[8] Note that we have excluded the 2015 - 2016 Parts A & B Interview Gap file from this table, since the file does not contain any RDDC_CCG values.

C4.3 Impact Rating & Rating Justification

RATING:	**Insignificant**
RATING JUSTIFICATION:	We based our Insignificant rating on the following two rating factors: (1) with a fundamental change to the source data necessary to the RDDC_CCGs, we have no option but to stop producing the RDDC_CCGs; and (2) the current percentage of records affected is less than 1%.

C4.4 Change Justification

Because the ICD-10 conversion substantially modified and removed source data for our RDDC_CCGs, we are no longer able to develop ICD-10 RDDC_CCGs consistent with the ICD-9 RDDC_CCGs produced prior to October 2015. Given this source data change as well as the fact that CMS will use ICD-10 diagnoses for all claims after October 2015, our Center lacks the data necessary to producing consistent RDDC_CCGs after October 2015 and will therefore phase out RDDC_CCGs.

To ensure that our Center continues to provide valuable information to researchers, we are currently investigating alternative coding hierarchies that could supplant the RDDC_CCGs and will alert researchers to any new coding hierarchies that we plan to implement in lieu of these chronic condition groups.

C4.5 Additional Documentation

For more information on ICD-9 and ICD-10 coding, consult ResDAC's Knowledge Base articles, entitled "International Classification of Disease (ICD) Codes in Medicare Files" and "Diagnosis and Procedure Coding Resources" on the ResDAC public website (https://www.resdac.org/).

C5 Updates to Drug Code Mappings in Part D Summary Files

In January 2016, the Department of Veteran Affairs (VA) updated the VA National Drug File that MedRIC uses to generate drug characteristics (i.e., Drug Major Class (DRUG_MAJOR_CLASS), Drug Subclass (DRUG_SUBCLASS), Proprietary Drug Name (PROPRIETARY_DRUG_NAME), and Generic Drug Name (GENERIC_DRUG_NAME)) for MedRIC Part D Summary Files. As a result of this VA modification, 0% - 2% of all Phase 21 drug characteristics have changed from "Unknown" to actual drug codes in Phase 22 files.

CHANGE CATEGORY:	Non-CMS Organization Updates its Drug Class Specifications
VERSION OF MEDRIC FILES AFFECTED:	**Phase 22 (Does This Change Affect Me?)**

C5.1 Change Examples

Table 14 and Table 15 below contain examples of Phase 21 and Phase 22 NDC Drug Major Class values respectively.

Table 14. Example of Phase 21 NDC Drug Major Class

NDC	DRUG MAJOR CLASS
39822027801	UNKNOWN
40085031530	UNKNOWN

Table 15. Example of Phase 22 NDC Drug Major Class

NDC	DRUG MAJOR CLASS
39822027801	ANTIMICROBIALS
40085031530	DERMATOLOGICAL AGENTS

C5.2 Affected Data

Table 16 below specifies the CMS files, years, and variables affected by the VA drug major classes change as well as quantifies the percentage of unknown drug major classes converted to specific drug major classes relative to the total number of records for those classes.

Table 16. Change Impact: VA Drug Classes

CMS FILE TYPE	CMS FILE YEARS	CMS VARNAME/ ARRAY	% OF UNKNOWN RECORDS MAPPED TO DRUG CODES COMPARED TO TOTAL RECORDS
Part D Summary Files	2006 - 2015	DRUG_MAJOR_CLASS	0% - 1%
Part D Summary Files	2006 - 2015	DRUG_SUBCLASS	0% - 1%
Part D Summary Files	2006 - 2015	PROPRIETARY_DRUG_NAME	1% - 2%
Part D Summary Files	2006 - 2015	GENERIC_DRUG_NAME	0% - 1%

C5.3 Impact Rating & Rating Justification

RATING:	**Low**

RATING JUSTIFICATION:	We based our Low rating on the following two rating factors: (1) VA modifications to its data have to be implemented to ensure that we are providing researchers with up-to-date drug major classes; and (2) the percentage of records affected across all variables is less than 2%.

C5.4 Change Justification

To ensure that NIH researchers have up-to-date drug major classes, our data team updates the drug major classes in the Part D Summary File whenever the VA prompts a change to its National Drug File.

C5.5 Additional Documentation

For additional details on this data source change, refer to https://catalog.data.gov/dataset/va-national-drug-file-may-2015.

> **Note that, although the URL specified above features a May 2015 data, the web page actually contains the January 2016 VA National Drug File.**

C6 Chronic Condition Warehouse (CCW) Algorithm Updates Modify Chronic Condition Specifications

In 2017, the Chronic Condition Warehouse (CCW) revised the chronic condition algorithm used to identify a beneficiary's chronic conditions. As a result of this algorithm change, 5% or less of all CCW's Chronic Condition (CC) values and 15% or less of all CCW CC Ever indicators in MedRIC's Phase 22 files have changed compared to equivalent CCW values and CCW Ever indicators in MedRIC's Phase 21 files.

CHANGE CATEGORY:	CCW Modification to Chronic Condition Specification Algorithm
VERSION OF MEDRIC FILES AFFECTED:	**Phase 22 (Does This Change Affect Me?)**

C6.1 Change Examples

Table 17 and Table 18 below contain examples of CCW's HYPOTH and HYPOTH_EVER values in MedRIC's Phase 21 and Phase 22 files respectively.

Table 17. Example of CCW's HYPOTH and HYPOTH_EVER Values in MedRIC's Phase 21 Files

HYPOTH	HYPOTH_EVER
2	20040429

Table 18. Example of CCW's HYPOTH and HYPOTH_EVER Values in MedRIC's Phase 22 Files

HYPOTH	HYPOTH_EVER
2	200400311

C6.2 Affected Data

Table 19 below specifies the CMS files, years, and variables affected by the CCW algorithm change as well as quantifies the percentage of modified chronic condition indicators compared to the total number of records for those indicators.

Table 19. Change Impact: CCW CCs

CMS FILE TYPE	CMS FILE YEARS	CMS VARNAME/ ARRAY	% MODIFIED CHRONIC CONDITION INDICATORS AS A RESULT OF CCW ALGORITHM CHANGES COMPARED TO TOTAL RECORDS
Parts A & B Summary Files	1991 - 2015	NE_HYPERL	5% - 10%
Parts A & B Summary Files	1991 - 2015	NE_HYPERT	2% - 5%
Parts A & B Summary Files	1991 - 2015	NE_RA_OA	2% - 5%
Parts A & B Summary Files	1991 - 2015	NE_RA_OA	2% - 5%
Parts A & B Summary Files	1991 - 2015	NE_HYPOTH	1% - 2%

CMS FILE TYPE	CMS FILE YEARS	CMS VARNAME/ ARRAY	% MODIFIED CHRONIC CONDITION INDICATORS AS A RESULT OF CCW ALGORITHM CHANGES COMPARED TO TOTAL RECORDS
Parts A & B Summary Files	1991 - 2015	NE_HYPERP	1% - 2%
Parts A & B Summary Files	1991 - 2015	NE_HYPERT	1% - 2%
Parts A & B Summary Files	1991 - 2015	NE_HYPERL	1% - 2%
Parts A & B Summary Files	1991 - 2015	NE_DIABETES	1% - 2%
Parts A & B Summary Files	1991 - 2015	NE_COPD	1% - 2%

CMS FILE TYPE	CMS FILE YEARS	CMS VARNAME/ ARRAY	% MODIFIED CHRONIC CONDITION INDICATORS AS A RESULT OF CCW ALGORITHM CHANGES COMPARED TO TOTAL RECORDS
Parts A & B Summary Files	1991 - 2015	All Other CCWs: 0% - 1%	
Parts A & B Summary Files	1991 - 2015	NE_HYPERT_EVER	10% - 20%
Parts A & B Summary Files	1991 - 2015	NE_HYPERL_EVER	10% - 20%
Parts A & B Summary Files	1991 - 2015	NE_RA_OA_EVER	10% - 20%
Parts A & B Summary Files	1991 - 2015	NE_HYPERL_EVER	5% - 10%

CMS FILE TYPE	CMS FILE YEARS	CMS VARNAME/ ARRAY	% MODIFIED CHRONIC CONDITION INDICATORS AS A RESULT OF CCW ALGORITHM CHANGES COMPARED TO TOTAL RECORDS
Parts A & B Summary Files	1991 - 2015	NE_HYPERT_EVER	5% - 10%
Parts A & B Summary Files	1991 - 2015	NE_HYPOTH_EVER	5% - 10%
Parts A & B Summary Files	1991 - 2015	NE_COPD_EVER	5% - 10%
Parts A & B Summary Files	1991 - 2015	NE_HYPERP_EVER	5% - 10%
Parts A & B Summary Files	1991 - 2015	NE_DIABETES_EVER	5% - 10%

CMS FILE TYPE	CMS FILE YEARS	CMS VARNAME/ ARRAY	% MODIFIED CHRONIC CONDITION INDICATORS AS A RESULT OF CCW ALGORITHM CHANGES COMPARED TO TOTAL RECORDS
Parts A & B Summary Files	1991 - 2015	NE_CATARACT_EVER	2% - 5%
Parts A & B Summary Files	1991 - 2015	NE_CATARACT_EVER	2% - 5%
Parts A & B Summary Files	1991 - 2015	NE_RA_OA_EVER	2% - 5%
Parts A & B Summary Files	1991 - 2015	NE_HYPERP_EVER	2% - 5%
Parts A & B Summary Files	1991 - 2015	NE_GLAUCOMA_EVER	2% - 5%

CMS FILE TYPE	CMS FILE YEARS	CMS VARNAME/ ARRAY	% MODIFIED CHRONIC CONDITION INDICATORS AS A RESULT OF CCW ALGORITHM CHANGES COMPARED TO TOTAL RECORDS
Parts A & B Summary Files	1991 - 2015	NE_ISCHEMICHEART_EVER	2% - 5%
Parts A & B Summary Files	1991 - 2015	NE_OSTEOPOROSIS_EVER	2% - 5%
Parts A & B Summary Files	1991 - 2015	NE_STROKE_TIA_EVER	2% - 5%
Parts A & B Summary Files	1991 - 2015	NE_CHRONICKIDNEY_EVER	2% - 5%
Parts A & B Summary Files	1991 - 2015	NE_ANEMIA_EVER	2% - 5%

CMS FILE TYPE	CMS FILE YEARS	CMS VARNAME/ ARRAY	% MODIFIED CHRONIC CONDITION INDICATORS AS A RESULT OF CCW ALGORITHM CHANGES COMPARED TO TOTAL RECORDS
Parts A & B Summary Files	1991 - 2015	NE_HYPOTH_EVER	2% - 5%
Parts A & B Summary Files	1991 - 2015	NE_ASTHMA_EVER	2% - 5%
Parts A & B Summary Files	1991 - 2015	NE_COPD_EVER	2% - 5%
Parts A & B Summary Files	1991 - 2015	NE_ATRIAL_FIB_EVER	1% - 2%
Parts A & B Summary Files	1991 - 2015	NE_ATRIAL_FIB_EVER	1% - 2%

CMS FILE TYPE	CMS FILE YEARS	CMS VARNAME/ ARRAY	% MODIFIED CHRONIC CONDITION INDICATORS AS A RESULT OF CCW ALGORITHM CHANGES COMPARED TO TOTAL RECORDS
Parts A & B Summary Files	1991 - 2015	NE_OSTEOPOROSIS_EVER	1% - 2%
Parts A & B Summary Files	1991 - 2015	NE_CHF_EVER	1% - 2%
Parts A & B Summary Files	1991 - 2015	NE_CANCER_PROSTATE_EVER	1% - 2%
Parts A & B Summary Files	1991 - 2015	NE_STROKE_TIA_EVER	1% - 2%
Parts A & B Summary Files	1991 - 2015	NE_GLAUCOMA_EVER	1% - 2%

CMS FILE TYPE	CMS FILE YEARS	CMS VARNAME/ ARRAY	% MODIFIED CHRONIC CONDITION INDICATORS AS A RESULT OF CCW ALGORITHM CHANGES COMPARED TO TOTAL RECORDS
Parts A & B Summary Files	1991 - 2015	NE_DEPRESSION_EVER	1% - 2%
Parts A & B Summary Files	1991 - 2015	All Other CCW – Ever Flags: 0% - 1%	

C6.3 Impact Rating & Rating Justification

RATING:	**Moderate**
RATING JUSTIFICATION:	We based our Moderate rating on the fact that CCW's modification to its chronic conditions logic impacts all chronic conditions as well as their ever flags.

C6.4 Change Justification

To ensure that MedRIC research files match the CCW's chronic conditions, we have updated the chronic condition methodology for all chronic conditions.

C6.5 Additional Documentation

For additional details on this change, refer to the CCW's Chronic Condition Algorithms PDF available on the Condition Categories section of their public website (www.ccwdata.org).

Appendix A Non-Substantial Changes to CMS Data Precipitated by CMS and Non-CMS Sources of CMS Data

In this Appendix, we list some, though not all, non-substantial changes to CMS data precipitated by CMS and non-CMS sources of CMS data.

> **As MedRIC is not the primary source of CMS data changes (rather, CMS is) and is not under contract with CMS to produce CMS data documentation, Appendix A does NOT contain a comprehensive list of non-substantial changes to CMS data.**
>
> **We strongly recommend that researchers periodically consult the Research Data Assistant Center (ResDAC) website for alerts about data changes.**

CMS Changes to Data Values

Over time, CMS may change variable values to reflect new or revised CMS policies, as well as to correct data anomalies. For example, CMS has:

- **Modified the Line NCH Berenson-Eggers Type of Service (BETOS) Code Values**

  In January 2016, CMS modified 6 out of 436,902 records for the BETOS codes from having no value (i.e., being an empty cell) to having Y1 values.

- **Modified the Claim Managed Care Organization (MCO) Paid Switch Code Values**

  As part of CMS's ongoing data management, CMS changed 18 MCO Paid Switch values from 1 to blank in its 2009 – 2012 Parts A & B Inpatient (IP) file.

Again, we strongly recommend that researchers review ResDAC's website periodically to identify recent changes to CMS data sources.

Appendix B CMS Metadata Resources

This Appendix identifies CMS metadata resources that, in conjunction with MedRIC data dictionaries, provide substantial information on CMS data to researchers.

> **Note: Because CMS and its contractors often change resource URLs, we have not provided resource URL links in this Appendix; instead, we have specified resource titles and Home page URLs.**

Medicare Parts A & B Data

- ResDAC Website (www.resdac.org) Resources
    - "Beneficiary Annual Summary File" Article
    - "Carrier RIF" Article
    - "Durable Medical Equipment RIF" Article
    - "Home Health Agency RIF" Article
    - "Hospice RIF" Article
    - "Inpatient RIF" Article

    - "Outpatient RIF" Article
    - "Skilled Nursing Facility RIF" Article
    - "Intro to the Use of Medicare Data for Research Videos" Web Page
- CMS's YouTube Website (https://www.youtube.com/user/CMSHHSgov) Resources
    - "Medicare Basics: Parts A & B Claims Overview" Video posted by CMSHHSgov

Medicare Part D Data

- ResDAC Website (www.resdac.org) Resources
    - "Part D Drug Event File" Article
    - "Medicare Part D Event File: Utilization Management Variables" Article
    - "Intro to the Use of Medicare Part D Data for Research Videos" Web Page

Long-Term Care Minimum Data Set (MDS)

- ResDAC Website (www.resdac.org) Resources

- "Long Term Care Minimum Data Set 2.0" Article
- "Long Term Care Minimum Data Set 3.0" Article
- "CMS MDS and OASIS Assessment Data" Video Web Page
- "Minimum Data Set" Video posted by CMSHHSgov

Home Health Outcome and Assessment Information Set (OASIS)

- ResDAC Website (www.resdac.org) Resources
  - "Home Health Outcome and Assessment Information Set" Article
  - "CMS MDS and OASIS Assessment Data" Video Web Page

Medicaid Analytic Extract (MAX) Data

- ResDAC Website (www.resdac.org) Resources
  - "MAX Inpatient File" Article
  - "MAX Long Term Care File" Article

- "MAX Other Therapy File" Article
- "MAX Personal Summary File" Article
- "MAX Prescription Drug File" Article
- "Medicaid Analytic Extract Files" Video Web Page

Appendix C CMS File Types: Versions & Years Matrix

Table 20 below specifies CMS file types and their layout versions by year.

Table 20. CMS File Types: Versions and Years Matrix

CMS FILE	VERSION H: FILE YEARS	VERSION I: FILE YEARS*	VERSION J: FILE YEARS*	VERSION K: FILE YEARS*
Durable Medical Equipment	NONE	1991 - 2008	2010 - 2013	2013 - 2016
Carrier	NONE	1991 - 2008	2010 - 2013	2013 - 2016
Home Health	1998, 1999	1991 - 1997, 2000 - 2010	2010 - 2013	2013 - 2016
Hospice	NONE	1991 - 2008	2010 - 2013	2013 - 2016
Inpatient	1998, 1999	1991 - 1997, 2000 - 2010	2010 - 2013	2013 - 2016
Outpatient	1997, 1998	1991 - 1996, 1999 - 2010	2010 - 2013	2013 - 2016
Skilled Nursing Facility	1998, 1999	1991 - 1997, 2000 - 2010	2010 - 2013	2013 - 2016

*CMS used both Versions I and J layouts in 2010. The agency also used Versions J and K layouts in 2012 and 2013.

Appendix D MedRIC Datasets: Version Information

Starting with Phase 22 files, we have instituted a Release Number in the header of each dataset to help you track and understand whether or not your existing files are affected by a change. This Release Number will consist of MedRIC's Phase Number (e.g., 21) and a sequential decimal value for the release, where:

1 the index 0 specifies the addition of new data years and/or an update to a survey linkage; and

2 a value between 1 and 9 specifies data modifications.

For example, a third release of Phase 21 files would have the release number of Phase 21.2, where:

- 21 refers to the Phase; and
- .2 refers to the unique identifier for the release.

Appendix E MedRIC Datasets: Release Timeline

Table 21 below lists each dataset that we have released, the contents of the dataset, a description of any changes, the distribution start and end dates, and whether we have included file version information in the dataset (for details on version information, refer to Appendix D).

Table 21. Dataset Release Information

RELEASE NO.	CONTENTS	DESCRIPTION OF CHANGE(S)	DISTRIBUTION START DATE	DISTRIBUTION END DATE	FILE VERSION LABEL USED?
21.0	• 1991 - 2012 Denominator (DN) • 1991 - 2012 Parts A & B Claims and Summary Files • 1991 - 2012 MedPAR (MP)	Initial Release of Phase 21	6/25/2014	2/26/2015	No

RELEASE NO.	CONTENTS	DESCRIPTION OF CHANGE(S)	DISTRIBUTION START DATE	DISTRIBUTION END DATE	FILE VERSION LABEL USED?
	• 2006 - 2012 Part D Drug Events (PDE) and Summary Files • 1999 - 2012 Long-Term Care Minimum Data Set (MDS) Assessments and Summary Files • 1999 - 2012 Home Health Outcome and Assessment Information Set (OASIS) Assessments and Summary Files				
21.1	• 1991 - 2012 DN	Corrected Repeating Claim IDs in Version H Files	3/10/2016	11/14/2017	No

RELEASE NO.	CONTENTS	DESCRIPTION OF CHANGE(S)	DISTRIBUTION START DATE	DISTRIBUTION END DATE	FILE VERSION LABEL USED?
	• 1991 - 2012 Parts A & B Claims and Summary Files • 1991 - 2012 MP • 2006 - 2012 PDE and Summary Files • 1999 - 2012 MDS Assessments and Summary Files • 1999 - 2012 OASIS Assessments and Summary Files				
21.2	• 1991 - 2012 DN • 1991 - 2012 Parts A & B Claims and Summary Files • 1991 - 2012 MP	Fixed Missing Procedure Dates and Version Codes	11/15/2017	2/28/2018	No

RELEASE NO.	CONTENTS	DESCRIPTION OF CHANGE(S)	DISTRIBUTION START DATE	DISTRIBUTION END DATE	FILE VERSION LABEL USED?
	• 2006 - 2012 PDE and Summary Files • 1999 - 2012 MDS Assessments and Summary Files • 1999 - 2012 OASIS Assessments and Summary Files				
21.3	• 1991 - 2012 DN • 1991 - 2012 Parts A & B Claims and Summary Files • 1991 - 2012 MP • 2006 - 2012 PDE and Summary Files	Fixed DRGWTAMT and DSCHFRCT x1000 amounts in 1991-2010 Inpatient (IP)/Skilled Nursing Facility (SN) Files[9] Blanked LCLYCD01-LCLYCD13 in	3/1/2018	4/4/2018	No

[9]Our Data Anomaly Report is forthcoming.

RELEASE NO.	CONTENTS	DESCRIPTION OF CHANGE(S)	DISTRIBUTION START DATE	DISTRIBUTION END DATE	FILE VERSION LABEL USED?
	• 1999 - 2012 MDS Assessments and Summary Files • 1999 - 2012 OASIS Assessments and Summary Files	Standard Carrier (PB) File[10] Blanked PRCGST01-PRCGST13 in Standard Durable Medical Equipment (DM) File[11]			
21.4	• 1991 - 2012 DN • 1991 - 2012 Parts A & B Claims and Summary Files • 1991 - 2012 MP • 2006 - 2012 PDE and Summary Files	As a result of linkage updates for 21.4, we dropped some HRS survey participants from the 1991-2010 Inpatient (IP) and Skilled Nursing Facility (SN) files.	4/5/2018	4/20/2018	No

[10] *Ibid*.
[11] *Ibid*.

RELEASE NO.	CONTENTS	DESCRIPTION OF CHANGE(S)	DISTRIBUTION START DATE	DISTRIBUTION END DATE	FILE VERSION LABEL USED?
	• 1999 - 2012 MDS Assessments and Summary Files • 1999 - 2012 OASIS Assessments and Summary Files	In addition, we removed duplicate records from OASIS.			
22.0	• 1991 - 2015 DN • 1991 - 2015 Parts A & B Claims and Summary Files • 1991 - 2015 MP • 2006 - 2015 PDE and Summary Files • 1999 - 2015 MDS Assessments and Summary Files	Initial Release of Phase 22	4/6/2018	10/9/2018	Yes

RELEASE NO.	CONTENTS	DESCRIPTION OF CHANGE(S)	DISTRIBUTION START DATE	DISTRIBUTION END DATE	FILE VERSION LABEL USED?
	• 1999 - 2015 OASIS Assessments and Summary Files				
22.1	• 1991 - 2016 DN • 1991 - 2016 Parts A & B Claims and Summary Files • 1991 - 2016 MP • 2006 - 2016 PDE and Summary Files • 1999 - 2016 MDS Assessments and Summary Files • 1999 - 2016 OASIS Assessments and Summary Files	Added 2016 Data to Phase 22	10/10/2018	Current	Yes

RELEASE NO.	CONTENTS	DESCRIPTION OF CHANGE(S)	DISTRIBUTION START DATE	DISTRIBUTION END DATE	FILE VERSION LABEL USED?
23.0	• 1999 - 2012 Medicaid Analytic Extract (MAX) Claims and Summary Files	Initial Release	9/7/2017	Current	No prior to January 2019[12]; Yes post-January 2019

[12] As we released MAX Claims and Summary Files prior to instituting our file version policy, all Max-related shipments prior to January 2019 did not include the label. All post-January 2019 MAX files will feature version information.

Acronyms, Abbreviations & Abbreviated Variable Name (Varname) List

ACRONYM/ABBREVIATION/ VARNAME	FULL TERM
AGE_AT_END_REF_YR	Age at End of Reference Year
BASF	Beneficiary Annual Summary File
BENE_DOB	Beneficiary Date of Birth
BETOS	Berenson-Eggers Type of Service
BID_HRS_22	Beneficiary Identifier_Health and Retirement Study_22
BISF	Beneficiary Interview Gap Summary File
BQSF	Beneficiary Quarterly Summary File

ACRONYM/ABBREVIATION/ VARNAME	FULL TERM
CC	Chronic Condition
CCG	Chronic Condition Group
CCW	Chronic Condition Warehouse
CMS	Centers for Medicare & Medicaid Services
DM	Durable Medical Equipment
DN	Denominator
DRGWTAMT	Claim PPS Capital DRG Weight Number

ACRONYM/ABBREVIATION/ VARNAME	FULL TERM
DSCHFRCT	Claim PPS Capital Discharge Fraction Percent
HH	Home Health
HHSTRTDT	Claim Home Health Agency Care Start Date
HRS	Health and Retirement Study
HS	Hospice
HYPOTH	Hypothyroiodism
HYPOTH_EVER	Hypothyroiodism Ever Flag

ACRONYM/ABBREVIATION/ VARNAME	FULL TERM
ICD	International Classification of Diseases
IP	Inpatient
MBSF	Master Beneficiary Summary File
MCO	Managed Care Organization
MDS	Long-Term Care Minimum Data Set
MedRIC	Medicare & Medicaid Resource Information Center
MP	Medicare Provider Analysis & Review (MedPAR)

ACRONYM/ABBREVIATION/ VARNAME	FULL TERM
NDCQTY	National Drug Code Quantity
OASIS	Home Health Outcome and Assessment Information
OP	Outpatient
PB	Carrier
PDE	Part D Drug Event
RDDC	Research Data Distribution Center
ResDAC	Research Data Assistant Center

ACRONYM/ABBREVIATION/ VARNAME	FULL TERM
RIF	Research Identifiable Files
RVCNTR	Revenue Center
SN	Skilled Nursing Facility
VA	Department of Veteran Affairs

Glossary

TERM	DEFINITION
character format	A variable format consisting of alphabetic and numeric characters.
chronic condition	A condition that persists for a long period of time (greater than three months).
data version	The version of a data layout.
data processing modification	A change to the methods of preparing and processing data for distribution.
data structuring modification	A change to the layout or organization of a dataset.
final action	The process of reconciling multiple claims for the same episode of care to determine final billing matters.

TERM	DEFINITION
Master Beneficiary Summary File (MBSF) – Base Segment	A data file containing enrollment information for Medicare Parts A & B, Part C, and Part D enrollment.
numeric format	A variable format consisting of numeric values only.
non-CMS source of CMS data	Any entity whose data is included within or impacts CMS data.
research files	The Medicare and/or Medicaid data files that MedRIC designs, develops, and disseminates.
substantial modification	A change to data that: • Impacts all or almost all values for a variable or array; and/or

TERM	DEFINITION
	• Impacts a variable or array that our data experts deem likely to be frequently used, even if the change does not affect a substantial portion of the variable's or array's values.
summary variable	A variable that aggregates and/or reconciles either the values of a single variable or the values of multiple variables across a given time period (e.g., annual, quarterly, and interview gap).

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