

Phase 4.0 MAO-004 Report User Guide



Change History

Document Version	Date	Description of Significant Changes
Version 1.0	December 2022	Initial version of the document

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Introduction

Purpose of the User Guide

The purpose of this user guide is to provide Medicare Advantage Organizations (MAOs) with a comprehensive manual for using the MAO-004 reports produced by the Centers for Medicare & Medicaid Services (CMS).

CMS created the MAO-004 report to provide MAOs with information on the risk adjustment eligibility of diagnoses submitted and accepted on encounter data. CMS started generating the MAO-004 report in 2016. Since then, there have been numerous modifications and improvements to the MAO-004 report. The latest version of the report is referred to as “Phase IV Version 0 (Phase 4.0).” The Phase indicates the report layout, and the version reflects the content of the report. The Phase 4.0 layout contains information on the status of diagnoses for risk adjustment for all accepted records.¹

This guide provides information on the MAO-004 report Phase 4.0, including detailed examples of how the report can be used to identify risk adjustment eligible diagnoses and which diagnoses make it to the model input file for the risk adjustment model run. Throughout the remainder of this guide, all references to the MAO-004 report are to the Phase 4.0 report.

In this guide, we provide an overview of the MAO-004 report, information regarding filtering rules, designating families, accounting for diagnoses, and finally identifying diagnoses that make it to the risk adjustment model input file for Medicare Advantage (MA) Encounter Data (ED) risk adjustment. Appendix I: Glossary contains a glossary of terms that includes definitions and additional information.

¹ There are a limited number of circumstances where CMS is not able to determine what the submitter intended for the diagnosis codes submitted on the encounter data or chart review record. As such, these records are not reported on the MAO-004 report.

² See [2015 Advanced Notice and Announcement](#).

³ HPMS Memorandum, “[Final Encounter Data Diagnosis Filtering Logic](#)” dated December 22, 2015.

Overview of Risk Adjustment

Risk adjustment enables CMS to pay MAOs for the risk of MA beneficiaries they enroll in Medicare Part C and Part D and is used to adjust bidding and payment based on the health status and demographic characteristics of an enrollee. A risk score represents a beneficiary's expected medical costs relative to the average expected cost of beneficiaries entitled to Medicare fee-for-service (FFS) and enrolled in Part A and Part B.

CMS uses a statistical model that uses a beneficiary's chronic conditions to calculate risk scores. The model, referred to as the CMS-HCC model, uses diagnoses mapped to hierarchical chronic condition categories (HCCs) as inputs. There have been numerous modifications and improvements to the CMS-HCC model since it was first implemented.

CMS began collecting detailed service-level data, known as encounter data, in 2012. Starting in the 2015 risk adjustment payment year, diagnoses submitted on encounter data were incorporated into risk adjustment payments.²

MAOs are required to submit the encounter data reflecting all services or items provided to MA enrollees. However, not all services or items are eligible for use in risk adjustment. Therefore, CMS must identify those diagnoses on accepted encounter data that meet risk adjustment rules. The methodology of identifying and selecting diagnoses for risk adjustment is referred to as the “filtering logic.” CMS published the encounter data filtering logic in the December 22, 2015, HPMS memo titled “Final Encounter Data Filtering Logic.”³

MAO-004 Report Overview

Accessing the MAO-004 Report

CMS distributes the MAO-004 reports to MAOs through the electronic file transfer (EFT) mailboxes and the Medicare Advantage Prescription Drug User Interface (MARx UI).

MAO's with active Enterprise User Administration (EUA) User IDs can also access archived reports using the MARx UI. See Appendix A: Accessing the MAO-004 Report on the MARx UI for instructions on accessing archived reports or visit the CSSC Operations.com to view a computer-based training (CBT) with additional information on accessing reports using the MARx UI.⁴

Table 1: MAO-004 Report Data Set Naming Conventions outlines the file name of the reports by transfer protocol. The naming conventions include the following information:

All Connectivity Methods

- xxxxx is the contract number the MAO-004 represents.
- P = Phase: The Phase can be 1 to 9 or A to Z ('4' for the Phase).
- V = Version: The Version can be 1 to 9 or A to Z ('0' for this Version).

EFT Mailbox

- zzzzzzzz is the Plan sponsor-provided high-level qualifiers for Connect: Direct Mainframe users.
- yymmdd is the two-digit year, two-digit month, two-digit day when the file was sent.
- thhmsst is the timestamp, representing the time the file was sent.

MARx UI

- yyyyymm is the four-digit year, two-digit month.

Table 1: MAO-004 Report Data Set Naming Conventions

System	Type	Frequency	File Length	MAO-004 Report Data Set Naming Conventions
EFT Mailbox	Data File	Monthly	500	<p>Gentran Mailbox/TIBCO MFT Internet Server: P.Rxxxxx.MAO004PV.Dyyymmdd.Thhmsst</p> <p>Connect:Direct (Mainframe): zzzzzzzz.Rxxxxx.MAO004PV.Dyyymmdd.Thhmsst</p> <p>Connect:Direct (Non-Mainframe): [directory]Rxxxxx.MAO004PV.Dyyymmdd.Thhmsst</p>
MARx UI	Data File	Monthly	500	P#MMA.@BDG5050.PLNxxxxx.Ryyyyymm.Ddd.MAO004PV

⁴ View the Microlearning CBT: "[Accessing Archived Reports using the MARx UI.](#)"

MAO-004 Report Distribution Frequency

The MAO-004 report is distributed by the 22nd of each month for encounter data submitted in the month prior. For example, records submitted in September are reported on the MAO-004 report released by the 22nd of October. Said another way, the “September MAO-004 report” would typically be released in October.

Each monthly report contains all accepted records submitted during the previous month, with flags indicating the risk adjustment eligibility of each diagnoses on each record. An MAO will receive an MAO-004 report only under the following circumstances:

Criteria 1: The encounter data have a 2014 or later date of service (DOS).

Criteria 2: Those encounter data are accepted at the header level and reported as such on the MAO-002 report.

For example, in July 2021, Happy Health Plan (HHP) submitted 60 encounter data records (EDRs) to the Encounter Data System (EDS) with the breakdown shown in **Table 2: Happy Health Plan Submission**.

Table 2: Happy Health Plan Submission

Date of Service	Total EDRs Submitted	MAO-002 Header Accepted	MAO-002 Header Rejected	Failed CMS ED Filtering Logic	Passed CMS ED Filtering Logic
2012	2	2	0	N/A	N/A
2013	3	3	0	N/A	N/A
2014	10	9	1	0	9
2015	15	15	0	0	15
2016	30	25	5	5	20
Total	60	54	6	5	44

When should HHP expect to receive the July 2021 MAO-004 Report?

- By August 22, 2021

Which submission month data will HHP receive on their MAO-004 report that was distributed August 22, 2021?

- Data submitted in July 2021

Based on **Criteria 1**, which DOS will HHP’s July MAO-004 report contain?

- 2014, 2015, and 2016

Based on **Criteria 2**, how many EDRs will HHP’s July MAO-004 report contain?

- 49 records (9+15+25)

Format of MAO-004 Report

The MAO-004 report is a 500-byte fixed length flat file. In response to suggestions provided by the industry, CMS has made several improvements to the MAO-004 report since the very first report was released in December 2015.

Table 3: MAO-004 Version History below shows the various iterations of the reports.

Table 3: MAO-004 Version History

Phase (Version)	CMS Release Month
Phase I	December 2015 ⁵
Phase II	October 2016 ⁶
Phase III (version 1)	March 2017 ⁷
Phase III (version 2)	May 2017 ⁸
Phase III (version 3)	April 2018
Phase IV (version 0)	December 2020 ⁹

This user guide includes the layout of the most recent MAO-004 report Phase 4.0.

The file layout is available in Appendix H: Phase IV Version 0 (Phase 4.0) MAO-004 Report File Layout and in the Plan Communications User Guide (PCUG) on the CMS website here: [Plan Communications User Guide](#).

The flat file has three components, which can be found in the PCUG in the List of File Layouts:

- MAO-004 Header Record, Phase IV, Version 0
- MAO-004 Detail Record, Phase IV, Version 0
- MAO-004 Trailer Record, Phase IV, Version 0

Reading the MAO-004 Report

The MAO-004 report indicates whether a specific encounter data, Encounter Data Record (EDR) and Chart Review Record (CRR), with its corresponding diagnoses are eligible for risk adjustment. The term 'Allowed' is applied to a record that is received in the Encounter Data System (EDS) prior to the applicable payment year deadline and passes the CMS risk adjustment filtering logic; conversely, the term 'Disallowed' is applied to a record that is received in the EDS after the CMS final risk adjustment deadline or does not pass in CMS risk adjustment filtering logic. The date of submission, and CMS' risk adjustment filtering logic determines whether a record is 'Allowed' or 'Disallowed.' Moreover, the MAO-004 report provides reason codes that indicate why a particular record is 'Disallowed.' The reason codes reported on the MAO-004 Report (Detail Field #27) can be found in Figure 2 in Appendix B: ED Filtering Process to Designate Diagnoses as Allowed/Disallowed and Reason Codes for Risk Adjustment, as Reported on the MAO-004. The reason code data field is left blank generally for records that are 'Allowed.' A more detailed discussion of 'Allowed' and 'Disallowed' and is provided in section [Filtering Rules for Medicare Advantage Encounter Data](#).

⁵ HPMS Memorandum, "[Distribution of MAO-004 Reports](#)," dated December 23, 2015.

⁶ HPMS Memorandum, "[Revised MAO-004 File Layout](#)," dated August 3, 2016.

⁷ HPMS Memorandum, "[Phase III MAO-004 File Layout](#)," dated March 22, 2017.

⁸ HPMS Memorandum, "[Phase III MAO-004 File Layout](#)," dated March 22, 2017.

⁹ HPMS Memorandum, "[Distribution Update: Re-issuing of Historical MAO-004 Reports in the New Version Phase IV Version 0 \(4.0\) format](#)," November 16, 2020.

Chart Review Records (CRRs)

In addition to submitting EDRs for items and services, MAOs and other organizations are also allowed to submit records that add or delete diagnosis information for risk adjustment payment purposes. These records are called CRRs and may include diagnoses collected through reviews of medical records. Specifically, CRRs allow submitters to (1) submit additional diagnoses that were not submitted when they reported an encounter but that were later found to be associated with an encounter that was previously reported (CRR-Add), and (2) delete diagnoses via a linked CRR that had been submitted on an EDR or CRR but were later found to be unsupported by the medical record (CRR-Delete). MAOs submit CRRs using the same 837 formats used for submitting EDRs.

If the CRR is adding diagnoses – that is, submitting diagnoses that were not reported when the EDR was first submitted – CMS will filter the CRR using the same method applied to EDRs.

If the CRR is deleting diagnoses from a previously submitted EDR or CRR, the deleted diagnoses will no longer be considered for risk adjustment. Deleting a diagnosis using a CRR only deletes the diagnosis from the specific EDR or CRR that is referenced on the delete record; in other words, it does not delete that diagnosis from any other EDRs or CRRs submitted for a beneficiary. The deleted diagnosis from that specific EDR will no longer be included in a beneficiary's pool of risk adjustment eligible diagnoses. If an unsupported diagnosis is reported on multiple CRRs or EDRs, each instance of the diagnosis will need to be deleted separately.

Filtering Rules for Medicare Advantage Encounter Data¹⁰

As previously discussed, MAOs submit to the Medicare Advantage Encounter Data System (EDS) the full breadth of information regarding services furnished to a beneficiary. Thus, CMS filters MA encounter data to determine which diagnoses are eligible for risk adjustment. The filtering logic establishes rules for determining which inpatient and outpatient facilities records and professional records are acceptable sources for risk adjustment-eligible diagnoses. The logic uses a combination of Current Procedural Terminology (CPT) and Healthcare Common Procedure Coding System (HCPCS) codes and type of bill, depending on whether the record is a professional record (5010 837-P) or institutional record (5010 837-I). The filtering logic will be described in subsequent sections of this guide.

The following section provides information on how CMS determines whether diagnoses on an EDR or CRR are eligible for risk adjustment and thus reported as 'Allowed' (Phase 4.0 MAO-004 Report, Details Field #25, Allowed/Disallowed flag = 'A') on the MAO-004 report.¹¹

Refer to Figure 2 in Appendix B: ED Filtering Process to Designate Diagnoses as Allowed/Disallowed and Reason Codes for Risk Adjustment, as Reported on the MAO-004 for a visual representation of this process.

¹⁰ HPMS Memorandum, "[Final Encounter Data Diagnosis Filtering Logic](#)," dated December 22, 2015.

¹¹ Please reference the HPMS memo titled, "[Updated Version of MAO-004 Reports \(Phase IV Version 0\) and Re-issuing of Historical MAO-004 Reports in the New Version](#)," dated July 21, 2020 for more information regarding terminology. Generally, 'Allowed'/'Disallowed' and their various forms are used for diagnoses passing or not passing the CMS Risk Adjustment filtering logic respectively; "Not Applicable" is used to designate that Risk Adjustment filtering does not apply to that record at all; "Eligible" is used for diagnoses that have passed the filtering logic (Allowed Adds), and which move on to the next step in the Risk Adjustment process, while all others are "Not Eligible".

CPT Code-Based Filtering of Professional EDRs & CRRs

Professional encounter data are derived from encounters where Part B claims and services have been provided. These claims and services are provided by physicians, non-physician practitioners (NPPs), and other Part B suppliers and are submitted in the 837-P format.¹² This includes EDRs deemed as professional (ISA8 Interchange Receiver ID = '80882') and as Durable Medical Equipment (DME) (ISA8 = '80887').

Diagnoses submitted on professional EDRs and CRRs are considered 'Allowed' for risk adjustment if:

1. The record is submitted prior to the final risk adjustment deadline, AND
2. The record is MAO-002 accepted at the header level, AND
3. At least one line on the record is MAO-002 accepted, AND
4. At least one of the MAO-002 accepted lines contain a service-year specific Medicare Risk Adjustment acceptable CPT/HCPCS code.^{13,14}

CMS will report all the "header diagnoses" on that record as 'Allowed,' and thus eligible for risk adjustment; otherwise, the record is 'Disallowed,' and CMS will NOT use any of the header diagnoses on the record for risk adjustment.

CMS reviews CPT/HCPCS codes quarterly for the current service year. If new CPT/HCPCS are created, or if the definitions of existing codes change, CMS may add codes to the list between quarters. From the perspective of the MAO-004 report, it is possible that a diagnosis code could be designated as

'Disallowed' in the first quarter due to a CPT/HCPCS code not being on the service-year specific risk adjustment list but then re-processed and designated as 'Allowed' in the third quarter, if the CPT/HCPCS is later added. However, CPT/HCPCS codes are not deleted throughout the year. For example, if the definition of a CPT/HCPCS code changes such that it no longer meets the risk adjustment eligibility criteria in the third quarter of a given service year, the code will not be removed from the list of acceptable CPT/HCPCS code list until the following service year.

Professional Risk Adjustment Filtering Examples

Professional Example I

On January 2, 2019, Ms. Jane Doe visits her primary care provider for her annual physical. During the physical, a blood sample is collected and sent out of the office to a lab for processing. On January 15, 2019, Happy Health Plan submits an EDR in the 837-P 5010 format to the EDS with procedure codes 99203 (New patient office or other outpatient visit) and 36415 (Insertion of needle into vein for collection of blood sample) together with header diagnoses I10 and E11 to report the service. The EDR is assigned an EDS ICN of 123. The ICN 123 header and all corresponding lines are accepted and reflected as such on the MAO-002 report. See **Table 4: Professional Example 1 Data Fields** and **Table 5: Professional Example 1 Risk Adjustment Eligibility** for the key data elements and questions used to determine risk adjustment eligibility for ICN 123.

¹² There is more information on submission formatting in the [Encounter Data Submission and Processing Guide](#).

¹³ CMS publishes the acceptable service year specific risk adjustment [CPT/HCPCS list](#) (a subset of all CPT/HCPCS codes).

¹⁴ HCPCS Level I codes are the CPT codes published by the American Medical Association; HCPCS Level II codes are additional alpha-numeric codes maintained by CMS and other entities. We refer to Level I and Level II HCPCS codes as "CPT/HCPCS codes."

Table 4: Professional Example 1 Data Fields

Data Field	Value on the ICN
Service Through Date Year	2019
Risk Adjustment Payment Year	2020
Payment Year Final Risk Adjustment Deadline	January 31, 2021
EDR Submission Date	January 15, 2019
2019 Service Year Acceptable CPT/HCPCS Codes	99203, 99214, 99213
MAO-002 Header Status	Accepted
MAO-002 Header Diagnoses	I10, E11
MAO-002 Line 1 (CPT 99203) Status	Accepted
MAO-002 Line 2 (CPT 36415) Status	Accepted

Table 5: Professional Example 1 Risk Adjustment Eligibility

Question	Data from ICN
What is the service type of ICN 123?	Professional
Is the ICN accepted at the header level?	Yes
Was the ICN submitted prior to the final risk adjustment deadline?	Yes
Is at least one line on ICN 123 accepted?	Yes
Does at least one of the accepted lines contain an acceptable 2019 service-year risk adjustment CPT/HCPCS code?	Yes (99203)
RA Filtering Outcome	EDR 123 with corresponding header diagnoses (I10 & E11) are 'Allowed' for risk adjustment.

Professional Example 2

On January 3, 2019, following Ms. Doe's annual physical, the blood sample was sent to a lab outside the office. Happy Health Plan submits a professional EDR to EDS with procedure code 99000 (Handling and/or conveyance of specimen for transfer from physician office to laboratory) together with header diagnosis code E11. The EDR is assigned an EDS ICN of

124. ICN 124 header and corresponding line are accepted in EDS and reflected as such on the MAO-002 report. See **Table 6: Professional Example 2 Data Fields** and **Table 7: Professional Example 2 Risk Adjustment Eligibility** for the key data elements and questions used to determine risk adjustment eligibility for ICN 124.

Table 6: Professional Example 2 Data Fields

Data Field	Value on the ICN
Service Through Date Year	2019 (greater than 2014)
Risk Adjustment Payment Year	2020
Payment Year Final Risk Adjustment Deadline	January 31, 2021
EDR Submission Date	January 17, 2019 (greater than 2014)
2019 Service Year Acceptable CPT/HCPCS Codes	99203, 99214, 99213
MAO-002 Header Status	Accepted
MAO-002 Header Diagnoses	E11
MAO-002 Line 1 (CPT 99000) Status	Accepted

Table 7: Professional Example 2 Risk Adjustment Eligibility

Question	Data from ICN
What is the service type of ICN 124?	Professional
Is ICN 124 accepted at the header level?	Yes
Was ICN 124 submitted prior to the final risk adjustment deadline?	Yes
Is at least one line on ICN 124 accepted?	Yes
Does at least one of the accepted lines contain an acceptable 2019 service year risk adjustment CPT/HCPCS code?	No
RA Filtering Outcome	EDR 124 with corresponding header diagnosis (E11) is 'Disallowed' for risk adjustment.

Filtering Institutional Inpatient EDRs and CRRs

Institutional inpatient EDRs are encounters where Part A items and services have been provided in an inpatient setting. These items and services are provided by facilities, including hospitals and various clinics, and are submitted in the 837 institutional format.

CMS uses the Type of Bill (TOB) Code to determine if the diagnosis on an inpatient EDR or CRR is eligible for risk adjustment. There is no CPT/HCPCS code screen for institutional inpatient TOBs. CMS reports an institutional inpatient EDR or CRR as 'Allowed' and takes all diagnoses on the header of the record when:

1. The record is MAO-002 accepted at the header level, AND
2. The record is submitted prior to the final risk adjustment deadline, AND
3. The TOB code on the EDR or CRR equals one of the following shown in **Table 8: Institutional Inpatient Acceptable Type of Bill Code**.

Table 8: Institutional Inpatient Acceptable Type of Bill Codes

Type of Bill (TOB) Codes	Label (first 2 digits)
11X	Hospital Inpatient
41X	Religious Nonmedical (Inpatient)

CMS will report all the header diagnoses on that record as 'Allowed,' thus eligible for risk adjustment; otherwise, the record is 'Disallowed,' and CMS will NOT use any of the header diagnoses on the record for risk adjustment.

Institutional Inpatient Risk Adjustment Filtering Example

Institutional Inpatient Example 1

On January 2, 2019, Ms. Jane Doe is admitted to an inpatient hospital. On January 15, 2019, after discharge, Happy Health Plan submits an EDR in the 837-I 5010 format with a TOB 11x to the EDS. The header diagnoses are I10 and E11. The EDR is assigned an EDS ICN of 125 and it is accepted and reported accordingly on the MAO-002 report. See **Table 9: Institutional Inpatient Example 1 Data Fields** and **Table 10: Institutional Inpatient Example 1 Risk Adjustment Eligibility** for the key data elements and questions used to determine risk adjustment eligibility for ICN 125.

Table 9: Institutional Inpatient Example 1 Data Fields

Data Field	Value on ICN 125
Service Through Date Year	2019 (greater than 2014)
Risk Adjustment Payment Year	2020
Payment Year Final Risk Adjustment Deadline	January 31, 2021
EDR Submission Date	January 15, 2019 (greater than 2014)
MAO-002 Header Status	Accepted
MAO-002 Header Diagnoses	I10, E11

Table 10: Institutional Inpatient Example 1 Risk Adjustment Eligibility

Question	Data from ICN
What is the service type of ICN 125?	Institutional Inpatient
Is ICN 125 accepted at the header level?	Yes
Was ICN 125 submitted prior to the final risk adjustment deadline?	Yes
Is the Type of Bill (TOB) code on ICN 125 designated as 11X or 41X?	Yes (11x)
RA Filtering Outcome	EDR 125 with corresponding header diagnoses (I10 & E11) are 'Allowed' for risk adjustment.

Filtering Institutional Outpatient EDRs and CRRs

Institutional outpatient EDRs are encounters where Part B items and services have been provided to a beneficiary on an outpatient basis. These items and services are provided by facilities, including hospitals and various clinics, and are submitted in the 837 institutional format.

CMS reports an institutional outpatient EDR or CRR as 'Allowed' and takes all diagnoses on the header of the record when:

1. The record is MAO-002 accepted at the header level, AND
2. The record is submitted prior to the final risk adjustment deadline, AND
3. The TOB code on the EDR or CRR equals one of the following shown in **Table 11: Institutional Outpatient Acceptable Type of Bill Codes**.

Table 11: Institutional Outpatient Acceptable Type of Bill Codes

Type of Bill (TOB) Codes	Label (first 2 digits)
12X	Hospital based or Inpatient (Part B only) or home health visits under Part B
13X	Hospital Outpatient
43X	Religious Nonmedical (Outpatient)
71X	Rural Health Clinic
73X	Freestanding Clinic
76X	Community Mental Health Center (CMHC)
77X	Clinic Federal Qualified Health Center (FQHC)
85X	Special Facility Critical Access Hospital (CAH)
87X	Freestanding Nonresidential Opioid Treatment Program ¹⁵

¹⁵ HPMS Memorandum, "[Encounter Data Software Release Updates: Announcement of changes to Edit 20945 and Edit 01415, and update on Type of Bill 87X for risk adjustment](#)," dated July 16, 2021.

AND

4. At least one line on the record is accepted and reported accordingly on the MAO-002 report, AND
5. At least one of the MAO-002 accepted lines contain an acceptable service-year specific risk adjustment CPT/HCPCS code.

CMS will report all the header diagnoses on that record as 'Allowed,' thus eligible for risk adjustment; otherwise, the record is 'Disallowed,' and CMS will NOT use any of the header diagnoses on the record for risk adjustment.

Institutional Outpatient Risk Adjustment Filtering Examples

Institutional Outpatient Example 1: Encounter

On January 2, 2019, Ms. Jane Doe goes to the emergency department (type of bill 13x) and receives a series of blood tests. The MAO submits an EDR in the 837-I 5010 format to the EDS on January 15, 2019, with two procedure codes 99285 (Emergency department visit for the evaluation) and 85025 (complete blood count) and two header diagnoses codes, J40 and N39.0. The EDR is assigned an ICN of 126. It is accepted at the header level; both lines are also accepted. See **Table 12: Institutional Outpatient Example 1 Data Fields** and **Table 13: Institutional Outpatient Example 1 Risk Adjustment Eligibility** for the key data elements and questions used to determine risk adjustment eligibility for ICN 126.

Table 12: Institutional Outpatient Example 1 Data Fields

Data Field	Value on ICN 126
Service Through Date Year	2019 (greater than 2014)
Risk Adjustment Payment Year	2020
Payment Year Final Risk Adjustment Deadline	January 31, 2021
EDR Submission Date	January 15, 2019 (greater than 2014)
2019 Service Year Acceptable CPT/HCPCS Codes	99285, 99214, 99213
MAO-002 Header Status	Accepted
MAO-002 Header Diagnoses	J40, N39.0
MAO-002 Line 1 (CPT 99285) Status	Accepted
MAO-002 Line 2 (CPT 85025) Status	Accepted

Table 13: Institutional Outpatient Example 1 Risk Adjustment Eligibility

Question	Data from ICN
What is the service type of ICN 126?	Institutional Outpatient
Is ICN 126 accepted at the header level?	Yes
Was ICN 126 submitted prior to the final risk adjustment deadline?	Yes
Is the Type of Bill (TOB) code on ICN 126 designated an institutional outpatient (see table 11)?	Yes (13x)
Is at least one line on ICN 126 accepted?	Yes
Does at least one of the accepted lines contain an acceptable 2019 service year risk adjustment CPT/HCPCS code?	Yes (99285)
RA Filtering Outcome	EDR 126 with corresponding header diagnoses (J40, N39.0) are 'Allowed' for risk adjustment.

Institutional Outpatient Example 2: Chart Review

After submitting the encounter for the emergency department visit, the MAO identified an additional diagnosis I10 that had not been reported previously. The MAO submitted the diagnosis on a chart review record (CRR) with type of bill 13X and procedure code 99285, consistent with the associated encounter. The CRR is assigned an EDS ICN of 127, it is

accepted at the header level, and the line is also accepted. See **Table 14: Institutional Outpatient Example 2 Data Fields** and **Table 15: Institutional Outpatient Example 2 Risk Adjustment Eligibility** for the key data elements and questions used to determine risk adjustment eligibility for ICN 127.

Table 14: Institutional Outpatient Example 2 Data Fields

Data Field	Value on ICN 127
Service Through Date Year	2019 (greater than 2014)
Risk Adjustment Payment Year	2020
Payment Year Final Risk Adjustment Deadline	January 31, 2021
EDR Submission Date	January 30, 2019 (greater than 2014)
2019 Service Year Acceptable CPT/HCPCS Codes	99285, 99214, 99213
MAO-002 Header Status	Accepted
MAO-002 Header Diagnoses	I10
MAO-002 Line 1 (CPT 99285) Status	Accepted

Table 15: Institutional Outpatient Example 2 Risk Adjustment Eligibility

Question	Data from ICN
What is the service type of ICN 127?	Institutional Outpatient
Is ICN 127 accepted at the header level?	Yes
Was ICN 127 submitted prior to the final risk adjustment deadline?	Yes
Is the Type of Bill (TOB) code on ICN 127 designated an institutional outpatient (see table 11)?	Yes (13x)
Is at least one line on ICN 127 accepted?	Yes
Does at least one of the accepted lines contain an acceptable 2019 service year risk adjustment CPT/HCPCS code?	Yes (99285)
RA Filtering Outcome	EDR 127 with corresponding header diagnosis (I10) is 'Allowed' for risk adjustment.

**Institutional Outpatient Example 3:
Replacement to Encounter**

A corrected claim was received for the emergency department visit that corrected several errors. The procedure codes and diagnoses are identical, but the date of service changed to 01/03/2019. The updated submission date is 01/02/2020, which is still before the final risk adjustment submission deadline. The MAO submits a corrected replacement encounter data record. The Replacement EDR is assigned an EDS ICN of 128. It is accepted at the header level; both lines are also accepted. See **Table 16: Institutional Outpatient Example 3 Data Fields** and **Table 17: Institutional Outpatient Example 3 Risk Adjustment Eligibility** for the key data elements and questions used to determine risk adjustment eligibility for ICN 128.

Table 16: Institutional Outpatient Example 3 Data Fields

Data Field	Value on ICN 128
Service Through Date Year	2019 (greater than 2014)
Risk Adjustment Payment Year	2020
Payment Year Final Risk Adjustment Deadline	January 31, 2021
EDR Submission Date	January 2, 2020 (greater than 2014)
2019 Service Year Acceptable CPT/HCPCS Codes	99285, 99214, 99213
MAO-002 Header Status	Accepted
MAO-002 Header Diagnoses	J40, N39.0
MAO-002 Line 1 (CPT 99285) Status	Accepted
MAO-002 Line 2 (CPT 85025) Status	Accepted

Table 17: Institutional Outpatient Example 3 Risk Adjustment Eligibility

Question	Data from ICN
What is the service type of ICN 128?	Institutional Outpatient
Is ICN 128 accepted at the header level?	Yes
Was ICN 128 submitted prior to the final risk adjustment deadline?	Yes
Is the Type of Bill (TOB) code on ICN 128 designated an institutional outpatient (see table 11)?	Yes (13x)
Is at least one line on ICN 128 accepted?	Yes
Does at least one of the accepted lines contain an acceptable 2019 service year risk adjustment CPT/HCPCS code?	Yes (99285)
RA Filtering Outcome	EDR 128 with corresponding header diagnoses (J40, N39.0) are 'Allowed' for risk adjustment.

Please reference Figure 2 in Appendix B: ED Filtering Process to Designate Diagnoses as Allowed/Disallowed and Reason Codes for Risk Adjustment, as Reported

on the MAO-004 for a detailed graphical representation of the filtering processing to designate records and its associated diagnoses as 'Allowed'/'Disallowed.'

Designating MA Encounter Data Families for Risk Adjustment

CMS' EDS allows for the submission of adjustments (replacements, voids, chart review adds and deletes) to originally submitted EDRs and CRRs.¹⁶ Submitters may link these records using the original ICN of the previously submitted and accepted records. The submission of EDRs and CRRs and how records are linked together (e.g., replacement records, void records, linked CRR-Deletes, and linked CRR-Adds) affects final diagnoses eligible for risk adjustment in a series of linked records (also referred to as an "encounter data family").

For MA risk adjustment purposes, families of EDRs and/or CRRs are records that are

submitted by the MAO for the purpose of replacing, voiding, adding, and/or deleting diagnoses from a previously submitted record. Encounter data families always begin with an original EDR or original CRR-Add with a bill frequency code not equal to "7" (replacement) or "8" (void/delete). All other adjustment records linked by ICNs are considered part of an encounter data family. Note that although Linked Chart Review-Adds are submitted as linked to another record, for the purpose of risk adjustment, all Linked Chart Review Add originals (bill frequency code not equal to "7" or "8") start a new family.

¹⁶ There is more information on submission guidance (or submission rules) in the [Encounter Data Submission and Processing Guide](#).

Please reference Appendix D: Designating Encounter Type Switch Values and Appendix E: Encounter Type Switch to Encounter Record Family Mapping – Table 23: Encounter Type

Switch to Encounter Record Family Mapping for more information on designating encounter data families.

Designating Encounter Data Families Example

The following are examples of how records are split into encounter data families based on the family designations described above.

The table below has the listing of all EDRs and CRRs Happy Health Plan submitted during a service year.

Table 18: HHP Submitted EDRs and CRRs

ICN	Original ICN	Claim Bill Freq	Chart Review Switch (Y or Blank)	Patient Med Rec Num	Dx 1	Dx 2	Dx 3
100		1			E11.42	I10	E11.69
102	100	1	Y	8	E11.42	I10	
103	102	7	Y	8	E11.42	E11.69	E13.43
104		1			E78	I10	Q25.3
105		1			M81.0	E11.69	Z11.2
106	105	1	Y		Z11.2		
107	106	7	Y		Z11.2	D64.9	
108	107	8	Y		Z11.2	D64.9	

There are four encounter data families in this scenario. They are described next:

Encounter Data Family Example 1

ICN 100 starts a new family because it is an original EDR. ICNs 102 and 103 are part of the family of ICN 100 because they are CRR-Delete records (patient medical record number is “8”).

Table 18-1: Family 1

ICN	Original ICN	Claim Bill Freq	Chart Review Switch (Y or Blank)	Patient Med Rec Num	Dx 1	Dx 2	Dx 3
100		1			E11.42	I10	E11.69
102	100	1	Y	8	E11.42	I10	
103	102	7	Y	8	E11.42	E11.69	E13.43

Encounter Data Family Example 2

ICN 104 starts a new family because it is an original EDR.

Table 18-2: Family 2

ICN	Original ICN	Claim Bill Freq	Chart Review Switch (Y or Blank)	Patient Med Rec Num	Dx 1	Dx 2	Dx 3
104		1			E78	I10	Q25.3

Encounter Data Family Example 3

ICN 105 starts a new family because it is an original EDR.

Table 18-3: Family 3

ICN	Original ICN	Claim Bill Freq	Chart Review Switch (Y or Blank)	Patient Med Rec Num	Dx 1	Dx 2	Dx 3
105		1			M81.0	E11.69	Z11.2

Encounter Data Family Example 4

Although ICN 106 is linked to ICN 105, ICN 106 starts a new family because it is an original (bill frequency code not "7" or "8") Chart Review-Add. ICN 107 is part of the family of ICN 106

because it is a replacement (bill frequency code = "7") CRR linked to ICN 106. Similarly, ICN 108 is in the family of ICN 106 because it is a CRR void record to ICN 107.

Table 18-4: Family 4

ICN	Original ICN	Claim Bill Freq	Chart Review Switch (Y or Blank)	Patient Med Rec Num	Dx 1	Dx 2	Dx 3
106	105	1	Y		Z11.2		
107	106	7	Y		Z11.2	D64.9	
108	107	8	Y		Z11.2	D64.9	

Accounting for Diagnoses for MA ED Risk Adjustment – Adds (A) /Deletes (D)¹⁷

Using the encounter data families from the example above and illustrated in **Table 18: HHP Submitted EDRs and CRRs**, the following scenarios demonstrate how added and/or deleted diagnosis codes are reported on the MAO-004 report. Please reference Appendix E: Encounter Type Switch to Encounter Record Family Mapping – Table 23: Encounter Type Switch to Encounter Record Family Mapping.

The encounters in **Table 18: HHP Submitted EDRs and CRRs** above are split into encounter data families as described in the section above and the diagnosis code add/delete reporting is as follows:

Add / Delete Reporting Example 1

The following records are a family. ICN 100 is an encounter data record. Since the bill frequency code is not "7" or "8," it starts a new family. ICN 102 is a chart review record, with a patient medical record number equal to "8," and points to ICN 100. Thus, ICN 102 is linked to the ICN 100 family. ICN 103 is also a replacement chart review record with a patient medical record number equal to "8," and points to ICN 102, so it is also linked to the ICN 100 family. All the diagnoses on ICN 100 are Added; ICN 102, deletes E11.42 and I10. ICN 103 replaces the original chart review delete. However, it includes a diagnosis (E13.43) that is not on the original encounter data record (ICN 100), thus reported as Not Applicable (N).

¹⁷ For additional examples see the user group slides from the August 27, 2020 slide deck located [here](#) on CSSC Operations website.

Table 19-1: Family 1 Add/Delete

ICN	Original ICN	Claim Bill Freq	Encounter Type	Chart Review Switch (Y or Blank)	Patient Med Rec Num	Dx 1	Dx 2	Dx 3	Dx Outcome 1	Dx Outcome 2	Dx Outcome 3	Dx Outcome 4
100		1	1			E11.42	I10	E11.69	E11.42(A)	I10(A)	E11.69(A)	
102	100	1	7	Y	8	E11.42	I10		E11.42(D)	I10(D)	E11.69(A)	
103	102	7	9	Y	8	E11.42	E11.69	E13.43	E11.42(D)	I10(A)	E11.69(D)	E13.43(N)

Add/Delete Reporting Example 2

ICN 104 starts a new family because it is an original encounter data record (bill frequency code is not “7” or “8”). All the diagnoses are additions, thus reported as Adds (A).

Table 19-2: Family 2 Add/Delete

ICN	Original ICN	Claim Bill Freq	Encounter Type	Chart Review Switch (Y or Blank)	Patient Med Rec Num	Dx 1	Dx 2	Dx 3	Dx Outcome 1	Dx Outcome 2	Dx Outcome 3
104		1	1			E78	I10	Q25.3	E78(A)	I10(A)	Q25.3(A)

Add/Delete Reporting Example 3

ICN 105 starts a new family because it is an original encounter data record (bill frequency code is not “7” or “8”). All the diagnoses are additions, thus reported as Adds (A).

Table 19-3: Family 3 Add/Delete

ICN	Original ICN	Claim Bill Freq	Encounter Type	Chart Review Switch (Y or Blank)	Patient Med Rec Num	Dx 1	Dx 2	Dx 3	Dx Outcome 1	Dx Outcome 2	Dx Outcome 3
105		1	1			M81.0	E11.69	Z11.2	M81.0(A)	E11.69(A)	Z11.2(A)

Add/Delete Reporting Example 4

The following records are a family. ICN 106 is an original linked chart review record. The medical record number is not “8,” and the bill frequency code is not “7” or “8” so it starts a new family. ICN 107 is a replacement chart review record (bill frequency code of “7”) and points to ICN 106. So ICN 107 is linked to the ICN 106 family. ICN 108 is a void chart review record (bill frequency code of “8”) and points to ICN 107, so ICN 108 is also linked to the ICN 106 family. ICN 106 adds the new diagnoses; replacement ICN 107 adds an extra diagnosis and repeats one diagnoses from the original record (ICN 106), thus all diagnoses are reported as adds. ICN 108 voids the replacement chart review record, thus all diagnoses are deleted.

Table 19-4: Family 4 Add/Delete

ICN	Original ICN	Claim Bill Freq	Encounter Type	Chart Review Switch (Y or Blank)	Patient Med Rec Num	Dx 1	Dx 2	Dx 3	Dx Outcome 1	Dx Outcome 2	Dx Outcome 3
106	105	1	4	Y		Z11.2			Z11.2(A)		
107	106	7	6	Y		Z11.2	D64.9		Z11.2(A)	D64.9(A)	
108	107	8	5	Y		Z11.2	D64.9		Z11.2(D)	D64.9(D)	

Also see Appendix F: Additional Examples on Diagnoses Add/Delete Reporting on the MAO-004 Report for more examples.

Logic to Determine Whether a Diagnosis Code Will Be Included in the Risk Adjustment Model Input File for Risk Adjustment Processing

After risk adjustment filtering to designate the allowed/disallowed status (see section [Filtering Rules for Medicare Advantage Encounter Data](#)), reconciling encounter families (see section [Designating MA Encounter Data Families for Risk Adjustment](#)), and accounting for diagnoses (see section [Accounting for Diagnoses for MA ED Risk Adjustment Adds/Deletes](#)), MAOs may need to gather all the information together in order to determine which diagnoses are included in the risk adjustment model input file. This section will outline how this is done.

Model Input File Inclusion Criteria

In order for a family and associated diagnoses codes to be included in a model input file process, it must meet three criteria:

1. The family must be 'Allowed'. The family Allowed/Disallowed status is determined by the last valid encounter type 1-6 record submitted on or prior to the submission deadline.
2. The family must be in the service year of the model input file for risk adjustment. The service year of the family is determined by the year of the claim through date on the last valid encounter type 1-6 record submitted on or prior to the submission deadline.
3. Any diagnosis code in the family that is in 'Add' status at the time of the submission deadline should be included in the model input file. The status of family diagnosis codes is determined by looking at the family diagnosis code status as of the last valid encounter type 1-9 record submitted on or prior to the submission deadline.

A valid record is defined as one of the following:¹⁸

1. An Original record (encounter types 1 and 4)
2. A Replacement record (encounter types 3 and 6) that points to a record that has not been previously replaced, voided, or deemed invalid
3. A Void record (encounter types 2 and 5) that points to a record that has not been previously replaced, voided, or deemed invalid
4. A CRR-Delete (encounter type 7) that points to either (a) an original record that has not been replaced or voided, or (b) the last replacement record that points to a record that has not been previously replaced, voided, or deemed invalid
5. A CRR-Delete Void (encounter type 8) that points to a CRR-Delete record that has not been previously replaced, voided, or deemed invalid
6. A Replacement CRR-Delete (encounter type 9) that points to a CRR-Delete record that has not been previously replaced, voided, or deemed invalid

In summary, if the last valid encounter type 1-6 record submitted on or prior to the deadline is 'Allowed' and is in the service year of interest, the family is eligible for inclusion in the model input file. If a family is eligible for inclusion, any family diagnosis code in the 'Add' status as of the last valid encounter type 1-9 record submitted on or prior to the deadline should be included in the model input file for risk adjustment.

¹⁸ See MAO-004 Detail Record – Phase IV, Version 0, field "Encounter Type Switch."

Examples of Records Included in the Model Input File

The following examples combine knowledge from the previous sections that covered designating the allowed/disallowed status, reconciling families, and account for diagnoses to get to those used to create a model input file. All the fields in the examples are on the MAO-004 report. The following examples assume the service year is 2018 and the payment year is 2019.

Please note that each of the families in these examples are independent and highlight different scenarios.

1. Access Health Plan submits an original encounter data record (ICN 1000), encounter type 1, that is valid.

Table 20-1: Original

Encounter Data								MAO-004 Report					2019 MIF (Deadline 1/31/2020)	
Bene	ICN	Original ICN	Claim Thru Date	Claim Submission Date	Encounter Type	Dx 1 (Add/ Delete)	Dx 2	ICN	Allow/ Disallow	Dx 1 (Add/ Delete)	Dx 2	Dx 3	Sample Bene	Dx
1	1000		01/15/2018	02/01/2018	1	R10.32		1000	A	R10.32 (A)			1	R10.32

Per the Model Input File Inclusion Criteria above, diagnoses R10.32 qualifies to move on to the risk adjustment model input process for risk adjustment for Beneficiary 1 because the record came in prior to the final 2019 risk adjustment deadline, the claim through date is in the service year, and the diagnoses code is in Add status.

2. Access Health Plan submits a valid replacement (ICN 1001), encounter type 3, linked to original ICN 1000.

Table 20-2: Original with Replacement

Encounter Data Record								MAO-004 Report					2019 MIF (Deadline 1/31/2020)	
Bene	ICN	Original ICN	Claim Thru Date	Claim Submission Date	Encounter Type	Dx 1 (Add/ Delete)	Dx 2	ICN	Allow/ Disallow	Dx 1 (Add/ Delete)	Dx 2	Dx 3	Sample Bene	Dx
2	1000		01/15/2018	02/01/2018	1	R10.32	R51	1000	A	R10.32 (A)	R51 (A)		2	R10.32
2	1001	1000	01/15/2018	02/15/2018	3	R10.32		1001	A	R10.32 (A)	R51 (D)			

Per the Model Input File Inclusion Criteria above, only diagnosis R10.32 qualifies to move on to the risk adjustment model input process for risk adjustment for Beneficiary 2. Diagnoses R51 does not because it is in Delete status.

- Access Health Plan submits an original encounter data record (ICN 1000) with a replacement (ICN 1001), which was disallowed due to HCPCS/CPT code.

Table 20-3: Original with Disallowed Replacement

Encounter Data Record								MAO-004 Report					2019 MIF (Deadline 1/31/2020)	
Bene	ICN	Original ICN	Claim Thru Date	Claim Submission Date	Encounter Type	Dx 1	Dx 2	ICN	Allow/Disallow	Dx 1	Dx 2	Dx 3	Sample Bene	Dx
3	1000		01/15/2018	02/01/2018	1	R10.32	R51	1000	A	R10.32 (A)	R51 (A)		3	(none)
3	1001	1000	01/15/2018	02/15/2018	3	R10.32		1001	D (H)	R10.32 (A)	R51 (D)			

Per the Model Input File Inclusion Criteria above, none of the diagnoses qualify to move on to the risk adjustment model input process for risk adjustment for Beneficiary 3 because replacement record 1001 was disallowed due to HCPCS/CPT code. All the records in the family came in prior to the final 2019 risk adjustment deadline.

4. Access Health Plan submits an original record (ICN 1000) with multiple replacement records, ICNs 1001 and 1002. The last replacement record (ICN 1002) is after the payment year 2019 risk adjustment deadline.

Table 20-4: Original with Multiple Replacements (Before and After Deadline)

Encounter Data Record								MAO-004 Report					2019 MIF (Deadline 1/31/2020)	
Bene	ICN	Original ICN	Claim Thru Date	Claim Submission Date	Encounter Type	Dx 1	Dx 2	ICN	Allow/Disallow	Dx 1	Dx 2	Dx 3	Sample Bene	Dx
4	1000		01/15/2018	02/01/2018	1	R10.32	R51	1000	A	R10.32 (A)	R51 (A)		4	(none)
4	1001	1000	01/15/2018	02/15/2018	3	R10.32		1001	D (H)	R10.32 (A)	R51 (D)			
4	1002	1001	01/15/2018	03/01/2020	3	R51(A)	E66.3	1002	D (D)	R10.32 (D)	R51 (A)	E66.3 (A)		

Per the Model Input File Inclusion Criteria above, none of the diagnoses qualify to move on to the risk adjustment model input process for risk adjustment for Beneficiary 4. The replacement prior to the risk adjustment deadline (1001) is disallowed for HCPCS/CPT, and the final replacement (1002) came in after the final 2019 risk adjustment deadline, thus not considered for the final payment run.

5. Access Health Plan submits an original record (ICN 1000) with multiple replacement records (ICN 1001 and 1002). The last replacement record is after the payment year 2019 risk adjustment deadline.

Table 20-5: Original with Multiple Replacements (Disallowed and After Deadline)

Encounter Data Record								MAO-004 Report					2019 MIF (Deadline 1/31/2020)	
Bene	ICN	Original ICN	Claim Thru Date	Claim Submission Date	Encounter Type	Dx 1 (Add/ Delete)	Dx 2	ICN	Allow/ Disallow	Dx 1 (Add/ Delete)	Dx 2	Dx 3	Sample Bene	Dx
5	1000		01/15/2018	02/01/2018	1	R10.32	R51	1000	A	R10.32 (A)	R51 (A)		5	(none)
5	1001	1000	01/15/2018	02/15/2018	3	R10.32		1001	D (T)	R10.32 (A)	R51 (D)			
5	1002	1001	01/15/2018	03/01/2020	3	R51(A)	E66.3	1002	D (D)	R10.32 (D)	R51 (A)	E66.3 (A)		

Per the Model Input File Inclusion Criteria above, none of the diagnoses qualify to move on to the risk adjustment model input process for risk adjustment for Beneficiary 5. The replacement prior to the risk adjustment deadline (1001) is disallowed for Type of Bill and the final replacement (1002) came in after the final 2019 risk adjustment deadline, thus not considered for the final payment run.

6. Access Health Plan submits an original record (ICN 1000) with multiple replacements (ICN 1001 and 1002). However, the second replacement record (ICN 1002) is linked to ICN 1000, which is already replaced by ICN 1001. Thus, ICN 1002 is invalid.

Table 20-6: Original with Multiple Replacements (Valid and Invalid)

Encounter Data Record								MAO-004 Report					2019 MIF (Deadline 1/31/2020)	
Bene	ICN	Original ICN	Claim Thru Date	Claim Submission Date	Encounter Type	Dx 1 (Add/ Delete)	Dx 2	ICN	Allow/ Disallow	Dx 1 (Add/ Delete)	Dx 2	Dx 3	Sample Bene	Dx
6	1000		01/15/2018	02/01/2018	1	R10.32	R51	1000	A	R10.32 (A)	R51 (A)		6	(none)
6	1001	1000	01/15/2018	02/15/2018	3	R10.32		1001	A	R10.32 (A)	R51 (D)			
6	1002	1000	01/15/2018	03/01/2019	3	R51	E66.3	1002	A	R51(N)	E66.3 (N)			

Per the Model Input File Inclusion Criteria above, diagnosis R10.32 qualifies to move on to the risk adjustment model input process for risk adjustment for Beneficiary 6. Since the final replacement (ICN 1002) was attempting to replace a record that had already been replaced, ICN 1002 is considered invalid and has no impact on the diagnoses used for risk adjustment (note that the add/delete status is set to 'N' for all diagnosis codes on ICN 1002).

7. Access Health Plan submits an original record (ICN 1000) with multiple replacement records (ICNs 1001, 1002, 1003).

Table 20-7: Original with Multiple Replacements (Valid, Invalid and Valid)

Encounter Data Record								MAO-004 Report					2019 MIF (Deadline 1/31/2020)	
Bene	ICN	Original ICN	Claim Thru Date	Claim Submission Date	Encounter Type	Dx 1 (Add/ Delete)	Dx 2	ICN	Allow/ Disallow	Dx 1 (Add/ Delete)	Dx 2	Dx 3	Sample Bene	Dx
7	1000		01/15/2018	02/01/2018	1	R10.32	R51	1000	A	R10.32 (A)	R51 (A)		7	R51 (A) E66.3 (A)
7	1001	1000	01/15/2018	02/15/2018	3	R10.32		1001	A	R10.32 (A)	R51 (D)			
7	1002	1000	01/15/2018	03/01/2018	3	R51	E66.3	1002	A	R51(N)	E66.3 (N)			
7	1003	1001	01/15/2018	04/01/2018	3	R51	E66.3	1003	A	R10.32 (D)	R51 (A)	E66.3 (A)		

Per the Model Input File Inclusion Criteria above, diagnoses R51 and E66.3 qualify to move on to the risk adjustment model input process for risk adjustment for Beneficiary 7. ICN 1002 is invalid because it is linked to replace ICN 1000, which has already been replaced by ICN 1001. The final replacement (1003), although submitted after an invalid ICN, is valid because it was linked to the replacement 1001. All the records in the family came in prior to the final 2019 risk adjustment deadline.

Also see Appendix G: Additional Examples on Determining Model Input Diagnoses for Risk Adjustment for more examples on this section.

Tips for Reconciling the MAO-004 Report and MAO-002 Reports

The MAO-002 Encounter Data Processing Status Report reports the status of all encounter service lines (accepted and rejected) in an encounter file along with error codes.

Records on the MAO-002 report can be reconciled with records on the MAO-004 report using the following fields on the MAO-004 report:

- Encounter ICN (MAO-004 Report, Details Field #9)
- Encounter Submission Date (MAO-004 Report, Details Field #17)

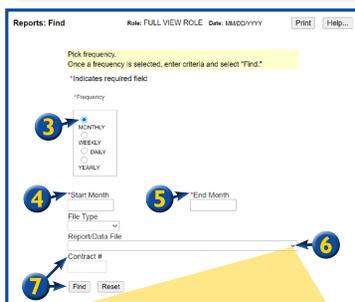
Appendix A: Accessing the MAO-004 Report on the MARx UI

Figure 1: Accessing the MAO-004 Report on the MARx UI Job Aid

Accessing Archived Reports Using MARx UI

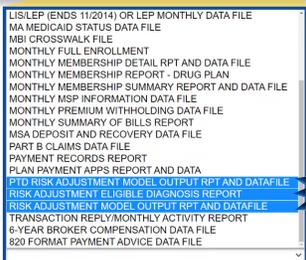


1. Log in to MARx UI (portal.cms.gov/portal)
2. Select the "Reports" navigation link (top of page)



3. Select "MONTHLY" for the frequency
4. Enter the "Start Month" (month/year)
5. Enter the "End Month" (month/year)
6. From the "Report/Data File" dropdown, select one of the following:

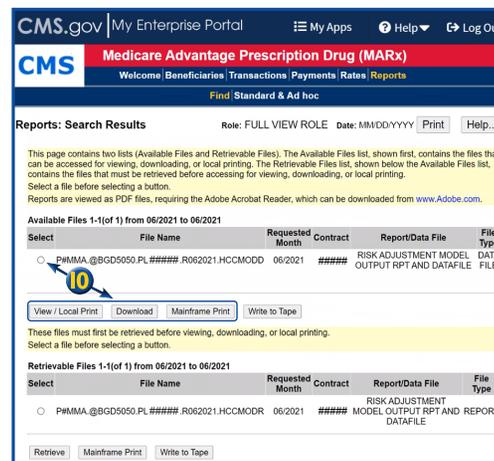
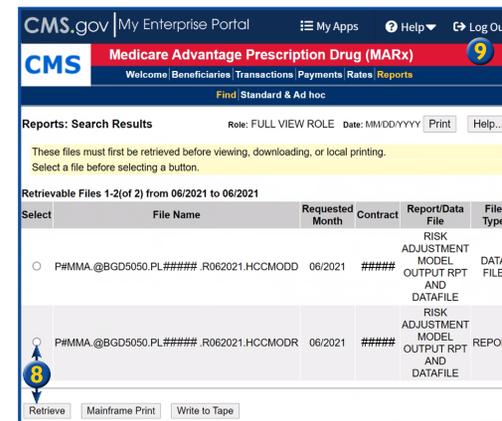
- "PTD Risk Adjustment Model Output RPT and Datafile" for a list of Part D MORs
 - "Risk Adjustment Eligible Diagnosis Report" for a list of MAO-004 reports
 - "Risk Adjustment Model Output RPT and Data File" for a list of Part C MORs
7. Enter your "Contract #" and select the "Find" button



1

Accessing Archived Reports using MARx UI

8. Select your desired report or data file and then select the "Retrieve" button.
9. Log out of the MARx UI online application while your report is being retrieved. After 5-7 minutes, log back into the web application and re-enter your search criteria (repeat steps 1-7).



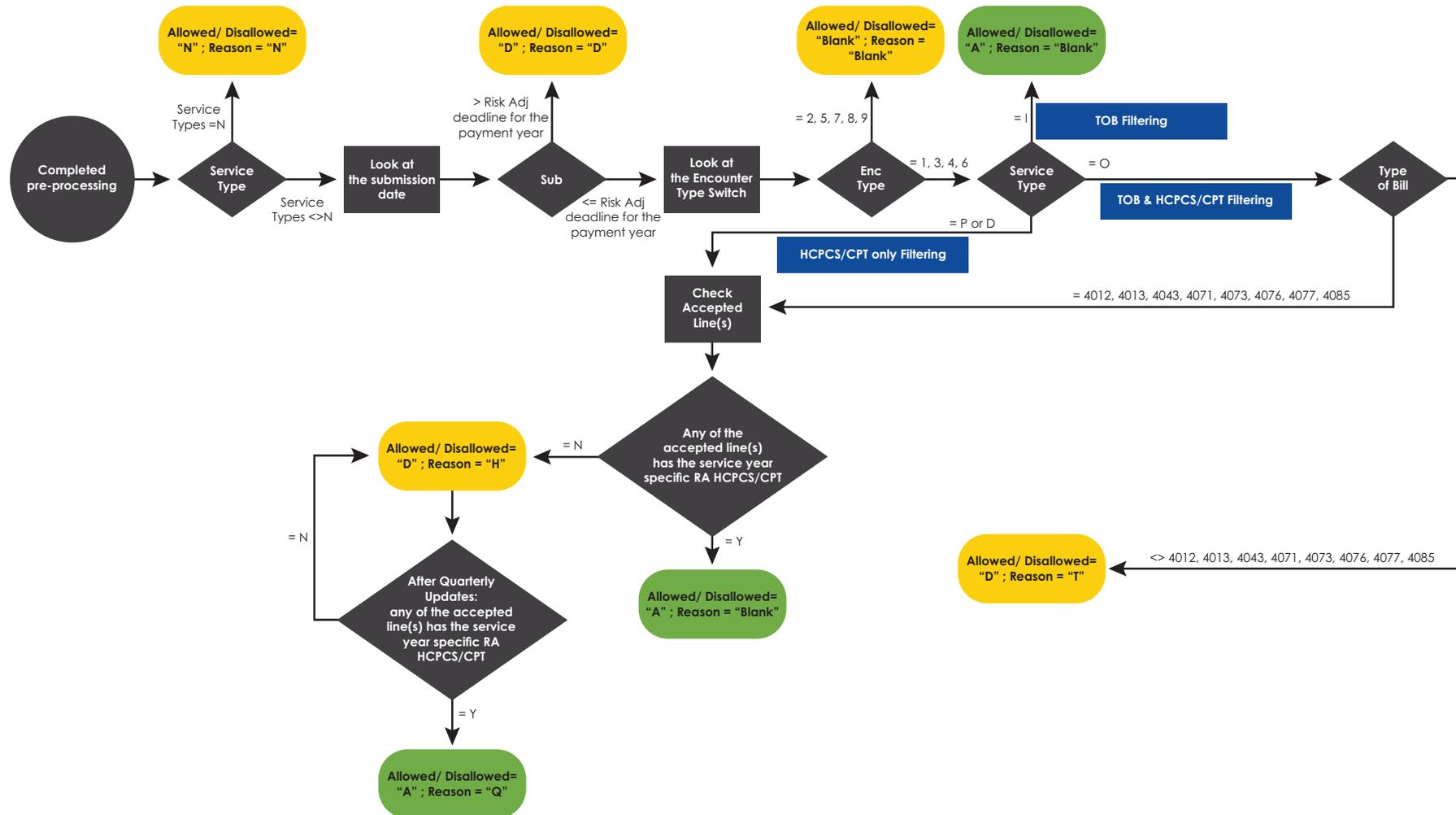
10. From the top of the Search Results page, select the report you would like to view, print, or download and then select the appropriate action button.

2

Accessing Archived Reports using MARx UI

Appendix B: ED Filtering Process to Designate Diagnoses as Allowed/Disallowed and Reason Codes for Risk Adjustment, as Reported on the MAO-004 (MAO-004 Details Fields #25 & #27)

Figure 2: This flow chart is a graphical representation of the processes to designate and report the risk adjustment eligibility of a record and its associated diagnoses (MAO-004 Report, Details #25 & 27), based on the CMS published filtering logic.¹⁹



¹⁹ For additional information on filtering see the HPMS memo dated July, 21, 2020 "Updated Version of MAO-004 Reports (Phase IV Version 0) and Re-issuing of Historical MAO-004 Reports in the New Version."

Appendix C: Designating Service Type Field - MAO-004 Report (Field #23)

MAOs and other entities submit encounter records with Type of Bill Codes. During the encounter data risk adjustment processing, these Type of Bill Codes are transformed into Service Type Codes and reported on the MAO-004 Report (Table 8 Details, Field #23).

This table provides the mapping of the Type of Bill Codes and Service Type field designations on the MAO-004 Report. Please note, P = Professional, I = Inpatient, O = Outpatient, D = DME, and N = (All Others) Not Applicable.

Table 21: Type of Bill Code to Service Type Field Mapping

Type of Bill	Service Type Field
000X Medicare Part C ENC Other Type of Bill Groups	N
011X Medicare Part C ENC Hospital Inpatient (Including Medicare Part A)	I
012X Medicare Part C ENC Hospital Inpatient (Medicare Part B only)	O
013X Medicare Part C ENC Hospital Outpatient	O
014X Medicare Part C ENC Hospital Laboratory Services Provided to Non-patients	O
018X Medicare Part C ENC Hospital Swing Beds	N
021X Medicare Part C ENC SNF Skilled Nursing Inpatient (Including Medicare Part A)	N
022X Medicare Part C ENC SNF Skilled Nursing Inpatient (Medicare Part B only)	O
023X Medicare Part C ENC SNF Skilled Nursing Outpatient	O
024X Medicare Part C ENC SNF Skilled Nursing Other + Laboratory Services Provided to Non-patients (Type of Bill discontinued in 2005)	N
028X Medicare Part C ENC SNF Skilled Nursing Swing Beds	N
032X Medicare Part C ENC Home Health + Inpatient (Medicare Part B only)	N
033X Medicare Part C ENC Home Health + Outpatient	N
034X Medicare Part C ENC Home Health + Laboratory Services Provided to Non-patients	O
041X Medicare Part C ENC Religious Nonmedical Health Care Institutions - Hospital Inpatient	I
043X Medicare Part C ENC Religious Nonmedical Health Care Institutions - Outpatient	O
065X Medicare Part C ENC Intermediate Care Intermediate Care Level I	O
066X Medicare Part C ENC Intermediate Care Intermediate Care Level II	O

Type of Bill	Service Type Field
071X Medicare Part C ENC Clinic RHC Rural Health	O
072X Medicare Part C ENC Clinic ESRD Renal Dialysis Hospital Based or Independent	O
073X Medicare Part C ENC Clinic Freestanding	O
074X Medicare Part C ENC Clinic ORF Outpatient Rehab Facility	O
075X Medicare Part C ENC Clinic CORF Comprehensive Outpatient Rehab Facility	O
076X Medicare Part C ENC Clinic CMHC Community Mental Health Centers	O
077X Medicare Part C ENC Clinic FQHC Federal Qualified Health Center	O
079X Medicare Part C ENC Clinic - Other	O
081X Medicare Part C ENC Special Facility Hospice Nonhospital-based	N
082X Medicare Part C ENC Special Facility Hospice Hospital-based	N
083X Medicare Part C ENC Special Facility ASC Ambulatory Surgery Center	O
084X Medicare Part C ENC Special Facility Freestanding Birthing Center	O
085X Medicare Part C ENC Special Facility CAH Critical Access Hospital	O
086X Medicare Part C ENC Special Facility Residential Facility	O
087X Freestanding Nonresidential Opioid Treatment Program ²⁰	O
089X Medicare Part C ENC Special Facility - Other	O
PROF Medicare Part C ENC Professional	P
DME Medicare Part C ENC DME	D

²⁰ HPMS Memorandum, "[Encounter Data Software Release Updates: Announcement of Changes to Edit 20495 and Edit 01415, and update on Type of Bill 87X for risk adjustment](#)," dated July 16, 2021.

Appendix D: Designating Encounter Type Switch Values (Phase 4.0 MAO-004 Details Field # 11)

In Phase III, CMS implemented the Encounter Type Switch field on the MAO-004 report to indicate how each record reported on the MAO-004 report was classified. CMS added this field because, in the past, some records that MAOs and other entities submitted to the EDS contained inconsistent or ambiguous information and CMS needed to determine the type of record in order to know how to treat the diagnoses on these “unexpected” records for risk adjustment. CMS uses the following fields to make these determinations: Submitted Bill Frequency Code, Chart Review Switch, Original ICN, and Patient Medical Record Number. CMS has implemented edits to prevent EDS from accepting these “unexpected” records. However, because historical data submitted prior to implementing the EDS edits were accepted, these data are processed through Phase IV. **Table 22: Encounter Type Switch Values** below identifies the submission scenario, whether or not the submission is “expected” based on Encounter Data submission guidance and which encounter type switch value these submissions are mapped to for risk adjustment processing.

Table 22: Encounter Type Switch Values

Encounter Type Switch Label	Encounter Type Switch Value	Expected Submission	Submitted Bill Frequency Code ²¹	Chart Review Switch ²²	Original ICN ²³	Patient Medical Record Number ²⁴
Encounter Data Record	1	Y	Not Equal to '7' or '8'	Blank	Blank (unlinked)	Blank
		N	Not Equal to '7' or '8'	Blank	Blank (unlinked) or populated with a value that is not found in EDS	Blank or populated with any value
		N	Not Equal to '7' or '8'	Blank	Links to Encounter Type Switch of 2, 5, or 8	Blank or populated with any value
		N	Equal to '7'	Blank	Blank (unlinked) or populated with a value that is not found in EDS	Blank or populated with any value

²¹ Submitted Bill Frequency code (Loop 2300 CLM 05-3)

²² Chart Review Switch (Loop 2300 PWK01/02; "09"/ "AA" = Y)

²³ Original ICN (Loop 2300 REF 01/02 = 'F8'/ICN)

²⁴ Patient Medical Record Number (Loop 2300 REF 01/02 = 'EA' / '8')

Encounter Type Switch Label	Encounter Type Switch Value	Expected Submission	Submitted Bill Frequency Code ²¹	Chart Review Switch ²²	Original ICN ²³	Patient Medical Record Number ²⁴
		N	Equal to '7'	Blank	Links to Encounter Type Switch of 2, 5, or 8	Blank or populated with any value
Void to an Encounter Data Record	2	Y	Equal to '8'	Blank	Links to Encounter Type Switch of 1 or 3	Blank
		N	Equal to '8'	Blank	Links to Encounter Type Switch of 1 or 3	Populated with any value
		N	Equal to '8'	Y	Links to Encounter Type Switch of 1 or 3	Blank or populated with any value
Replacement to an Encounter Data Record	3	Y	Equal to '7'	Blank	Links to Encounter Type Switch of 1 or 3	Blank
		N	Equal to '1'	Blank	Links to Encounter Type Switch of 1 or 3	Blank or populated with any value
		N	Equal to '7'	Blank	Links to Encounter Type Switch of 1 or 3	Populated with any value
		N	Equal to '7'	Y	Links to Encounter Type Switch of 1 or 3	Blank or populated with any value
Chart Review Record Add	4	Y	Not Equal to '7' or '8'	Y	Blank (unlinked) or links to any accepted and reported ICN	Blank
		N	Not equal to '7' or '8'	Y	Links to any accepted and reported ICN	Does not = '8'
		N	Not equal to '7' or '8'	Y	Populated with a value that is not found in EDS	Does not = '8'

Encounter Type Switch Label	Encounter Type Switch Value	Expected Submission	Submitted Bill Frequency Code ²¹	Chart Review Switch ²²	Original ICN ²³	Patient Medical Record Number ²⁴
		N	Not equal to '7' or '8'	Blank	Links to Encounter Type Switch of 4, 6, 7, or 9	Blank or populated with any value
		N	Equal to '7'	Y	Links to Encounter Type Switch of 2, 5, or 8 or populated with a value that is not found in EDS	Does not = '8'
		N	Equal to '7'	Y	Blank (unlinked)	Blank or populated with any value
Void to a Chart Review Record	5	Y	Equal to '8'	Y	Links to Encounter Type Switch of 4 or 6	Blank
		N	Equal to '8'	Blank	Links to Encounter Type Switch of 4 or 6	Blank or populated with any value
		N	Equal to '8'	Y	Links to Encounter Type Switch of 4 or 6	Populated with any value
Replacement to a Chart Review Record	6	Y	Equal to '7'	Y	Links to Encounter Type Switch of 4 or 6	Blank
		N	Equal to '7'	Blank	Links to Encounter Type Switch of 4 or 6	Blank or populated with any value
		N	Equal to '7'	Y	Links to Encounter Type Switch of 4 or 6	Populated with any value
Chart Review Record Delete	7	Y	Equal to '1'	Y	Links to Encounter Type Switch of 1, 3, 4, or 6	= '8'
		N	Not equal to '1' '7', or '8'	Y	Links to Encounter Type Switch of 1, 3, 4, or 6	= '8'

Encounter Type Switch Label	Encounter Type Switch Value	Expected Submission	Submitted Bill Frequency Code ²¹	Chart Review Switch ²²	Original ICN ²³	Patient Medical Record Number ²⁴
Void to Chart Review Record Delete	8	Y	Equal to '8'	Y	Links to Encounter Type Switch of 7 or 9	= '8'
		N	Equal to '8'	Blank	Links to Encounter Type Switch of 7 or 9	Blank or populated with any value
		N	Equal to '8'	Y	Links to Encounter Type Switch of 7 or 9	Blank or populated with any value
Replacement to Chart Review Record Delete ²⁵	9	Y	Equal to '7'	Y	Links to Encounter Type Switch of 7 or 9	= '8'
		N	Equal to '7'	Blank	Links to Encounter Type Switch of 7 or 9	Blank or populated with any value
		N	Equal to '7'	Y	Links to Encounter Type Switch of 7 or 9	Blank or populated with any value

²⁵ Replacement to CRR Deletes are no longer accepted by the EDS. These will be applicable to older accepted data in the EDS.

Appendix E: Encounter Type Switch to Encounter Record Family Mapping

CMS' EDS allows submitters to link new record submissions to previously submitted and accepted EDRs and/or CRRs. These records include replacements and voids. As stated above, in encounter data risk adjustment processing, these records are grouped together as an "encounter record family" to reconcile the diagnoses among the records as added, deleted, or not applicable and create a diagnosis profile for each beneficiary. **Table 23: Encounter Type Switch to Encounter Record Family Mapping** shows how these families are constructed for risk adjustment. There is no change in how these families are grouped between Phase 3.3 and Phase 4.0.

Table 23: Encounter Type Switch to Encounter Record Family Mapping

Encounter Type Switch Value	Family Designations	Add/Delete Reporting (Table 8, Details Fields #31-35)
1: Encounter Data Record	Starts a new family	All unique diagnoses on the record are reported as "Add" (A).
2: Void to Encounter Data Record	Part of the family of the ICN it is linked to	<p>All diagnoses on the Original ICN (Details Field #13) are reported as "Delete" (D).</p> <p>All diagnoses on the void and not on the Original ICN (Details Field #13) are reported as "Not Applicable" (N).</p> <p>***If there is a CRR-Delete (Encounter Types = "7" through "9") attached to an EDR that is being voided, the CRR-Delete is treated as part of the Original ICN (Details Field #13) being voided. The void record voids both the Original ICN (Details Field #13) record and the CRR-Delete record attached to the Original ICN (Details Field #13) record.</p> <p>****A void record that points to a non-active Original ICN (Details Field #13) is also considered non-active, and all diagnoses on the void are reported as "Not Applicable" (N).</p>

Encounter Type Switch Value	Family Designations	Add/Delete Reporting (Table 8, Details Fields #31-35)
3: Replacement to Encounter Data Record	Part of the family of the ICN it is linked to	<p>Common diagnoses between the replacement and the Original ICN (Details Field #13) are reported as "Add" (A).</p> <p>New, unique diagnoses on the replacement record are reported also as an "Add" (A).</p> <p>Diagnoses on Original ICN (Details Field #13) but not on the new replacement are reported as "Delete" (D).</p> <p>***If there is a CRR-Delete (Encounter Types = "7" through "9") attached to the record that is being replaced, the CRR-Delete is treated as part of the Original ICN (Details Field #13) being replaced. The replacement replaces the Original ICN record (Details Field #13) and the CRR-Delete record.</p> <p>****A replacement record that points to a non-active Original ICN (Details Field #13) is also considered non-active, and all diagnoses on the replacement are reported as "Not Applicable" (N).</p> <p>Note: The beneficiary identifier on the replacement takes precedence if different.</p>
4: Chart Review Record Add	Starts a new family	All unique diagnoses on the record are reported as "Add" (A).
5: Void to a Chart Review Add Record	Part of the family of the ICN it is linked to	<p>All diagnoses on the Original ICN (Details Field #13) voided are reported as "Delete" (D).</p> <p>All diagnoses on the void and not on the Original ICN (Details Field #13) are reported as "Not Applicable" (N).</p> <p>***If there is a CRR-Delete (Encounter Types="7" through "9") attached to a chart review record that is being voided, the CRR-Delete is treated as part of the Original ICN (Details Field #13) being voided. The void record voids both the Original ICN (Details Field #13) record and the CRR-Delete record attached to the Original ICN (Details Field #13) record.</p> <p>****A void record that points to a non-active Original ICN (Details Field #13) is also considered non-active, and all diagnoses on the void are reported as "Not Applicable" (N).</p>

Encounter Type Switch Value	Family Designations	Add/Delete Reporting (Table 8, Details Fields #31-35)
6: Replacement to a Chart Review Add Record	Part of the family of the ICN it is linked to	<p>Common diagnoses between the replacement and the Original ICN (Details Field #13) are reported as "Add" (A).</p> <p>New, unique diagnoses on the replacement record are also reported as "Add" (A).</p> <p>Diagnoses on Original ICN (Details Field #13) but not on the new replacement are reported as "Delete"(D).</p> <p>***If there is a CRR-Delete (Encounter Types="7" through "9") attached to the record that is being replaced, the CRR-Delete is treated as part of the Original ICN (Details Field #13) being replaced. The replacement replaces the Original ICN (Details Field #13) record and the CRR-Delete record.</p> <p>****A replacement record that points to a non-active Original ICN (Details Field #13) is also considered non-active, and all diagnoses on the replacement are reported as "Not Applicable" (N).</p> <p>Note: The beneficiary identifier on the replacement takes precedence if different.</p>
7: Chart Review Record Delete	Part of the family of the ICN it is linked to	<p>All instances of the specified diagnoses on the chart review delete record are deleted from the Original ICN (Details Field #13) it is linked to; these specified diagnoses are reported as "Delete" (D).</p> <p>If a specified diagnosis on the CRR-Delete is not on the Original ICN (Details Field #13), the diagnosis is reported as "Not Applicable" (N).</p> <p>Also, all the diagnoses in the encounter family that remain in add status will be re-reported as "Add" (A).</p> <p>****A chart review delete record that points to a non-active Original ICN (Details Field #13) is also considered non-active, and all diagnoses on the chart review delete record are reported as "Not Applicable" (N).</p>

Encounter Type Switch Value	Family Designations	Add/Delete Reporting (Table 8, Details Fields #31-35)
8: Void to Chart Review Record Delete	Part of the family of the ICN it is linked to	<p>Add ("A") back diagnoses to the Original ICN (Details Field #13), which the voided chart review delete record had deleted previously</p> <p>All diagnoses on the void and not on the Original ICN (Details Field #13) are reported as "Not Applicable" (N).</p> <p>Also, all the diagnoses in the encounter family that remain in add status will be re-reported as "Add" (A).</p> <p>****A void record that points to a non-active Original ICN (Details Field #13) is also considered non-active, and all diagnoses on the void are reported as "Not Applicable" (N).</p>
9: Replacement to Chart Review Record Delete	Part of the family of the ICN it is linked to	<p>Common diagnoses on the replacement chart review delete and the Original ICN (Details Field #13) are reported as "Delete" (D).</p> <p>Diagnoses on the chart review delete replacement but not on the Original ICN (Details Field #13) are reported as a "Delete" (D).</p> <p>Diagnoses not on the chart review delete replacement but on the Original ICN (Details Field #13) are reported as "Add" (A).</p> <p>If a specified diagnosis on the CRR-Delete is not on the Original ICN (Details Field #13) of the Original CRR-Delete, report the diagnoses as "Not Applicable" (N).</p> <p>Also, all the diagnoses in the encounter family that remain in "Add" status will be re-reported as "Add" (A).</p> <p>****A replacement record that points to a non-active Original ICN (Details Field #13) is also considered non-active, and all diagnoses on the replacement are reported as "Not Applicable" (N).</p> <p>Please note that currently, chart review delete replacement records are rejected by EDPS.</p>

Appendix F: Additional Examples on Diagnoses Add/Delete Reporting on the MAO-004 Report

Happy Health Plan Examples

- Happy Health Plan submitted an original encounter data record for services provided to beneficiary Jerry. The submission has diagnoses I10, E78.5, R51. The submission was accepted by EDS. All the diagnoses are new adds.

Table 24-1: Original EDR Submission

ICN	Original ICN	Claim Bill Freq	Encounter Type	Chart Review Switch (Y or Blank)	Patient Med Rec Num	Dx 1	Dx 2	Dx 3	Dx Outcome 1	Dx Outcome 2	Dx Outcome 3
89		1	1			I10	E78.5	R51	I10(A)	E78.5(A)	R51(A)

- Happy Health Plan recognized that diagnosis R51 was not correct; therefore, they submitted a Chart Review Delete to change Jerry's submission profile to delete diagnosis R51.

Table 24-2: CRR delete Submission

ICN	Original ICN	Claim Bill Freq	Encounter Type	Chart Review Switch (Y or Blank)	Patient Med Rec Num	Dx 1	Dx Outcome 1	Dx Outcome 2	Dx Outcome 3
90	89	1	7	Y	8	R51	I10(A)	E78.5(A)	R51(D)

- After doing a chart review activity, Happy Health Plan recognizes that Jerry also had diagnoses I31.9 and D50.9. Therefore, a Chart Review Add needs to be submitted to add diagnoses I31.9 and D50.9 to Jerry's profile.

Table 24-3: CRR add Submission

ICN	Original ICN	Claim Bill Freq	Encounter Type	Chart Review Switch (Y or Blank)	Patient Med Rec Num	Dx 1	Dx 2	Dx Outcome 1	Dx Outcome 2
91	89	1	4	Y		I31.9	D50.9	I31.9(A)	D50.9(A)

Sunshine Health Plan Examples

4. Sunshine Health Plan does a chart review activity and finds that Katie has diagnoses I10, E11, R51, so it submits the diagnoses to CMS on a *Chart Review Record*.

Table 25-1: Original CRR Submission

ICN	Original ICN	Claim Bill Freq	Encounter Type	Chart Review Switch (Y or Blank)	Patient Med Rec Num	Dx 1	Dx 2	Dx 3	Dx Outcome 1	Dx Outcome 2	Dx Outcome 3
100		1	4	Y		I10	E11	R51	I10(A)	E11(A)	R51(A)

5. Sunshine Health Plan recognized that not all the diagnoses were correct. Therefore, they clear out the diagnoses with a *Chart Review Delete* (ICN 101). However, Sunshine Health Plan also recognized that Katie has E66.3, J18.9, and N19, so they submitted a *Chart Review Add* (ICN 102).

Table 25-2: CRR delete Submission

ICN	Original ICN	Claim Bill Freq	Encounter Type	Chart Review Switch (Y or Blank)	Patient Med Rec Num	Dx 1	Dx 2	Dx 3	Dx Outcome 1	Dx Outcome 2	Dx Outcome 3
101	100	1	7	Y	8	I10	E11	R51	I10(D)	E11(D)	R51(D)
102		1	4	Y		E66.3	J18.9	N19	E66.3(A)	J18.9(A)	N19(A)

6. Finally, Sunshine Health Plan learns that Katie does not have N19, but has R06.02, so Sunshine Health Plan submits a *Chart Review Replacement* to Replace ICN 102.

Table 25-3: CRR Replacement Submission

ICN	Original ICN	Claim Bill Freq	Encounter Type	Chart Review Switch (Y or Blank)	Patient Med Rec Num	Dx 1	Dx 2	Dx 3	Dx Outcome 1	Dx Outcome 2	Dx Outcome 3	Dx Outcome 4
103	102	7	6	Y		E66.3	J18.9	R06.02	E66.3(A)	J18.9(A)	N19(D)	R06.02(A)

Appendix G: Additional Examples on Determining Model Input Diagnoses for Risk Adjustment

Care Health Plan Examples

- Care Health Plan submits an original record (ICN 1000) with a subsequent void record. ICN 1001 is a void, encounter type 2, that deletes the two diagnosis codes on ICN 1000.

Table 26-1: Original with Void

Encounter Data Record									MAO-004 Report					2019 MIF (Deadline 1/31/2020)	
Bene	ICN	Original ICN	Claim Thru Date	Claim Submission Date	Encounter Type	Allow/Disallow	Dx 1 (Add/Delete)	Dx 2	ICN	Allow/Disallow	Dx 1 (Add/Delete)	Dx 2	Dx 3	Sample Bene	Dx
8	1000		01/15/2018	02/01/2018	1	A	R10.32	R51	1000	A	R10.32 (A)	R51 (A)		8	None
8	1001	1000	01/15/2018	03/01/2018	2		R10.32	R51	1001		R10.32 (D)	R51 (D)			

Per the Model Input File Inclusion Criteria diagnoses R10.32 and R51 do not qualify to move on to the risk adjustment model input process for risk adjustment for Beneficiary 8. ICN 1000, with its associated diagnoses were voided by ICN 1000. All the records in the family came in prior to the final 2019 risk adjustment deadline.

- Care Health Plan submits an original record (ICN 1000) with a subsequent void record (ICN 1001), encounter type 2. The void record was submitted after the risk adjustment deadline, therefore, was disallowed due to deadline.

Table 26-2: Original with Disallowed Void

Encounter Data Record									MAO-004 Report					2019 MIF (Deadline 1/31/2020)	
Bene	ICN	Original ICN	Claim Thru Date	Claim Submission Date	Encounter Type	Allow/Disallow	Dx 1 (Add/Delete)	Dx 2	ICN	Allow/Disallow	Dx 1 (Add/Delete)	Dx 2	Dx 3	Sample Bene	Dx
9	1000		01/15/2018	02/01/2018	1	A	R10.32	R51	1000	A	R10.32 (A)	R51 (A)		9	R10.32
9	1001	1000	01/15/2018	04/01/2022	2	D (D)	R10.32	R51	1001	D (D)	R10.32 (D)	R51 (D)			R51

Per the Model Input File Inclusion Criteria, diagnoses R10.32 and R51 qualify to move on to the risk adjustment model input process for risk adjustment for Beneficiary 9. ICN 1000, with its associated diagnoses were voided by ICN 1000; however, ICN 1001 was submitted after the final 2019 risk adjustment deadline.

- Care Health Plan submits an original record (ICN 1000) with a subsequent replacement record, encounter type 3, and a void encounter type 2, which are both accepted.

Table 26-3: Original with Replacement and Void

Encounter Data Record									MAO-004 Report					2019 MIF (Deadline 1/31/2020)	
Bene	ICN	Original ICN	Claim Thru Date	Claim Submission Date	Encounter Type	Allow/ Disallow	Dx 1 (Add/ Delete)	Dx 2	ICN	Allow/ Disallow	Dx 1 (Add/ Delete)	Dx 2	Dx 3	Sample Bene	Dx
10	1000		01/15/2018	02/01/2018	1	A	R10.32	R51	1000	A	R10.32 (A)	R51 (A)		10	None
10	1001	1000	01/15/2018	02/15/2018	3	A	R10.32		1001	A	R10.32 (A)	R51 (D)			
10	1002	1001	01/15/2018	03/01/2018	2		R10.32		1002		R10.32 (D)				

Per the Model Input File Inclusion Criteria , none of the diagnoses qualify to move on to the risk adjustment model input process for risk adjustment for Beneficiary 10. ICN 1000 was replaced by ICN 1001 which was subsequently voided with its associated diagnoses, by ICN 1002. All the records were submitted prior to the final 2019 risk adjustment deadline.

4. Care Health Plan submits an original record (ICN 1000) with subsequent replacement record (encounter type 3) and a void record (encounter type 2).

Table 26-4: Original with Replacement and Disallowed Void

Encounter Data Record									MAO-004 Report					2019 MIF (Deadline 1/31/2020)	
Bene	ICN	Original ICN	Claim Thru Date	Claim Submission Date	Encounter Type	Allow/ Disallow	Dx 1 (Add/ Delete)	Dx 2 (Add/ Delete)	ICN	Allow/ Disallow	Dx 1 (Add/ Delete)	Dx 2	Dx 3	Sample Bene	Dx
11	1000		01/15/2018	02/01/2018	1	A	R10.32	R51	1000	A	R10.32 (A)	R51 (A)		11	R10.32
11	1001	1000	01/15/2018	02/15/2018	3	A	R10.32		1001	A	R10.32 (A)	R51 (D)			
11	1002	1001	01/15/2018	04/01/2020	2	D (D)	R10.32		1002	D (D)	R10.32 (D)				

Per the Model Input File Inclusion Criteria, diagnosis R10.32 qualifies to move on to the risk adjustment model input process for risk adjustment for Beneficiary 11. ICN 1000 was replaced by ICN 1001, which was subsequently voided with its associated diagnoses, by ICN 1002. However, ICN 1002 was submitted after the final 2019 risk adjustment deadline.

5. Care Health Plan submits an original record (ICN 1000) with subsequent replacement record (encounter type 3) and a void (encounter type 2), which are both disallowed.

Table 26-5: Original with Disallowed Replacement and Disallowed Void

Encounter Data Record									MAO-004 Report					2019 MIF (Deadline 1/31/2020)	
Bene	ICN	Original ICN	Claim Thru Date	Claim Submission Date	Encounter Type	Allow/Disallow	Dx 1 (Add/Delete)	Dx 2	ICN	Allow/Disallow	Dx 1 (Add/Delete)	Dx 2	Dx 3	Sample Bene	Dx
12	1000		01/15/2018	02/01/2018	1	A	R10.32	R51	1000	A	R10.32 (A)	R51 (A)		12	None
12	1001	1000	01/15/2018	02/15/2018	3	D (H)	R10.32		1001	D (H)	R10.32 (A)	R51 (D)			
12	1002	1001	01/15/2018	04/01/2020	2	D (D)	R10.32		1002	D (D)	R10.32 (D)				

Per the Model Input File Inclusion Criteria, none of the diagnoses qualifies to move on to the risk adjustment model input process for risk adjustment for Beneficiary 12. ICN 1000 was replaced by ICN 1001, which was subsequently voided with its associated diagnoses, by ICN 1002. However, ICN 1002 was submitted after the final 2019 risk adjustment deadline.

6. Care Health Plan submits an original record (ICN 1000) with a CRR delete (ICN 1001) that is accepted to delete a specified diagnosis.

Table 26-6: Original with CRR-Delete

Encounter Data Record									MAO-004 Report					2019 MIF (Deadline 1/31/2020)	
Bene	ICN	Original ICN	Claim Thru Date	Claim Submission Date	Encounter Type	Allow/Disallow	Dx 1 (Add/Delete)	Dx 2	ICN	Allow/Disallow	Dx 1 (Add/Delete)	Dx 2	Dx 3	Sample Bene	Dx
13	1000		01/15/2018	02/01/2018	1	A	R10.32	R51	1000	A	R10.32 (A)	R51 (A)		13	R51
13	1001	1000	01/15/2018	02/15/2018	7		R10.32		1001		R10.32 (D)	R51 (A)			

Per the Model Input File Inclusion Criteria, diagnosis R51 qualifies to move on to the risk adjustment model input process for risk adjustment for Beneficiary 13. ICN 1001, the chart review delete record deleted diagnosis R10.32 from ICN 1000. All the records were submitted prior to the final 2019 risk adjustment deadline.

7. Care Health Plan submits an original record (ICN 1000) with a CRR delete (ICN 1001) to remove a specified diagnosis.

Table 26-7: Original with Disallowed CRR-Delete

Encounter Data Record									MAO-004 Report					2019 MIF (Deadline 1/31/2020)	
Bene	ICN	Original ICN	Claim Thru Date	Claim Submission Date	Encounter Type	Allow/ Disallow	Dx 1 (Add/ Delete)	Dx 2	ICN	Allow/ Disallow	Dx 1 (Add/ Delete)	Dx 2	Dx 3	Sample Bene	Dx
14	1000		01/15/2018	02/01/2018	1	A	R10.32	R51	1000	A	R10.32 (A)	R51 (A)		14	R10.32
14	1001	1000	01/15/2018	04/01/2020	7	D (D)	R10.32		1001	D (D)	R10.32 (D)	R51 (A)			R51

Per the Model Input File Inclusion Criteria, both diagnoses R10.32 and R51 qualify to move on to the risk adjustment model input process for risk adjustment for Beneficiary 14. ICN 1001, the chart review delete record deleted diagnosis R10.32 from ICN 1000. However, ICN 1001 was submitted after to the final 2019 risk adjustment deadline; therefore, record and the delete was not considered for the final 2019 risk adjustment for this family of records.

8. Care Health Plan submits an original record (ICN 1000) with a subsequent replacement record (ICN 1001) and a final chart review delete record (encounter type 7).

Table 26-8: Original with Replacement and CRR-Delete

Encounter Data Record									MAO-004 Report					2019 MIF (Deadline 1/31/2020)			
Bene	ICN	Original ICN	Claim Thru Date	Claim Submission Date	Encounter Type	Allow/Disallow	Dx 1 (Add/Delete)	Dx 2	ICN	Allow/Disallow	Dx 1 (Add/Delete)	Dx 2	Dx 3	Sample Bene	Dx		
15	1000		01/15/2018	02/01/2018	1	A	R10.32	R51	1000	A	R10.32 (A)	R51 (A)		15	R10.32		
15	1001	1000	01/15/2018	02/15/2018	3	A	R10.32	E66.3	1001	A	R10.32 (A)	R51 (D)	E66.3 (A)				
15	1002	1001	01/15/2018	03/01/2018	7		E66.3		1002		R10.32 (A)	E66.3 (D)					

Per the Model Input File Inclusion Criteria, diagnoses R10.32 qualifies to move on to the risk adjustment model input process for risk adjustment for Beneficiary 15. ICN 1001 replaced ICN 1000. Then, ICN 1002, the chart review delete record is submitted to delete only diagnosis E66.3 from ICN 1001. All the records are submitted prior to the final 2019 risk adjustment deadline.

9. Care Health Plan submits an original record (ICN 1000) with a CRR delete (ICN 1001) to delete the specified diagnosis. The plan then submits a replacement record ICN 1002 (encounter type 3) to replace ICN 1000.

Table 26-9: Original with CRR – Delete and Replacement

Encounter Data Record									MAO-004 Report					2019 MIF (Deadline 1/31/2020)	
Bene	ICN	Original ICN	Claim Thru Date	Claim Submission Date	Encounter Type	Allow/ Disallow	Dx 1 (Add/ Delete)	Dx 2	ICN	Allow/ Disallow	Dx 1 (Add/ Delete)	Dx 2	Dx 3	Sample Bene	Dx
16	1000		01/15/2018	02/01/2018	1	A	R10.32	R51	1000	A	R10.32 (A)	R51 (A)		16	E66.3
16	1001	1000	01/15/2018	02/15/2018	7		R10.32		1001		R10.32 (D)	R51 (A)			
16	1002	1001	01/15/2018	03/01/2018	3	A	E66.3		1002	A	R10.32 (D)	E66.3 (A)			

Per the Model Input File Inclusion Criteria, diagnosis E66.3 qualifies to move on to the risk adjustment model input process for risk adjustment for Beneficiary 16. ICN 1001, the chart review delete record deleted specifically diagnosis R10.32. Subsequently, ICN 1002, the replacement record, replaced ICN 1000, which overrides the chart review delete record 1001 linked to 1000. All the records in the family are submitted prior to the final 2019 risk adjustment deadline.

Appendix H: Phase IV Version 0 (Phase 4.0) MAO-004 Report File Layout²⁶

Table 27: Header

#	Item	Notes	Length	Starting Position	Ending Position	Format
1	Record Type	0: Header	1	1	1	Numeric, no commas and/or decimals
2	Delimiter		1	2	2	Uses the * character
3	Report ID	Value is "MAO-004"	7	3	9	Alpha Numeric
4	Delimiter		1	10	10	Uses the * character
5	Medicare Advantage Contract ID	Medicare Contract ID assigned to the submitting contract	5	11	15	Alpha Numeric
6	Delimiter		1	16	16	Uses the * character
7	Report Date	The last date of the submission month the report is created for	8	17	24	Numeric, format CCYYMMDD
8	Delimiter		1	25	25	Uses the * character
9	Report Description	Value is "Encounter Data Diagnosis Eligible for Risk Adjustment"	53	26	78	Alpha Numeric, left justify, blank fill
10	Delimiter		1	79	79	Uses the * character
11	Filler		30	80	109	Spaces
12	Delimiter		1	110	100	Uses the * character
13	Submission File Type	Value of "PROD," for production and "TEST" for test files	4	111	114	Alpha Numeric
14	Delimiter		1	115	115	Uses the * character

²⁶ HPMS Memorandum, "Updated Version of MAO-004 Reports (Phase IV Version 0) and Reissuing of Historical MAO-004 Reports in the New Version," dated July 21, 2020.

#	Item	Notes	Length	Starting Position	Ending Position	Format
15	Phase	This field designates the Phase layout of the MAO-004 report (In this case "4")	1	116	116	Alpha Numeric
16	Delimiter		1	117	117	Uses the * character
17	Version	This field designates the Version within the phase of the MAO-004 report (In this case "0")	1	118	118	Alpha Numeric
18	Delimiter		1	119	119	Uses the * character
19	Filler		381	120	500	Spaces

Table 28: Details

#	Item	Notes	Length	Starting Position	Ending Position	Format
1	Record Type	1: Detail	1	1	1	Numeric, no commas and/or decimals
2	Delimiter		1	2	2	Uses the * character
3	Report ID	Value is "MAO-004"	7	3	9	Alpha Numeric
4	Delimiter		1	10	10	Uses the * character
5	Medicare Advantage Contract ID	Medicare Contract ID assigned to the submitting contract	5	11	15	Alpha Numeric
6	Delimiter		1	16	16	Uses the * character
7	Beneficiary Identifier	Beneficiary Health Insurance Claim Number (HICN) or Medicare Beneficiary Identifier (MBI)	12	17	28	Alpha Numeric

#	Item	Notes	Length	Starting Position	Ending Position	Format
8	Delimiter		1	29	29	Uses the * character
9	Encounter ICN	EDS ICN. In encounter data, only 13 spaces represent the ICN; however, there are 20 spaces on the records to allow for enhancements to the ICN.	20	30	49	Alpha Numeric
10	Delimiter		1	50	50	Uses the * character
11	Encounter Type (Table 10)	This field can take on 9 different values: “1”: Encounter Data Record “2”: Void to an Encounter Data Record “3”: Replacement to an Encounter Data Record “4”: Chart Review Record Add “5”: Void to a Chart Review Record Add “6”: Replacement to a Chart Review Record Add “7”: Chart Review Record Delete “8”: Void to a Chart Review Record Delete “9”: Replacement to a Chart Review Record Delete	1	51	51	Alpha Numeric
12	Delimiter		1	52	52	Uses the * character
13	ICN of Encounter Linked To	EDS ICN. This field reports the ICN submitted and referenced on replacement, void, and linked CRRs. It will be blank for original encounters data records and unlinked CRRs.	20	53	72	Alpha Numeric
14	Delimiter		1	73	73	Uses the * character

#	Item	Notes	Length	Starting Position	Ending Position	Format
15	Allowed/ Disallowed Status of Encounter Linked To	<p>This field reports the risk adjustment status of the referenced ICN (field #13)</p> <p>“A”: The referenced record and its associated diagnoses were allowed.</p> <p>“D”: The referenced record and its associated diagnoses were disallowed.</p> <p>Blank:</p> <p>(1) if the current record is an original EDR, or</p> <p>(2) if the current record is an unlinked chart review record</p> <p>or</p> <p>(3) if the record is a linked chart review with an invalid ICN in Field #13, or</p> <p>(4) if the diagnoses on the record whose ICN is in Field 13 did not pass the filtering logic and were not previously reported on a MAO-004 report.</p> <p>(5) if the record points to another record which the allowed/disallowed was not set and reported before</p>	1	74	74	
16	Delimiter		1	75	75	Uses the * character
17	Encounter Submission Date	Identifies the date the MAO submitted the encounter record	8	76	83	Numeric, format CCYYMMDD
18	Delimiter		1	84	84	Uses the * character

#	Item	Notes	Length	Starting Position	Ending Position	Format
19	"From" Date of Service	The beginning of a provided service	8	85	92	Numeric, format CCYYMMDD
20	Delimiter		1	93	93	Uses the * character
21	"Through" Date of Service	The end date for a provided service.	8	94	101	Numeric, format CCYYMMDD
22	Delimiter		1	102	102	Uses the * character
23	Service Type (Table 11)	Type of Claim: "P" : Professional; "I" : Inpatient; "O" : Outpatient; "D" : DME; "N" : All Others (Not Applicable)	1	103	103	Alpha Numeric
24	Delimiter		1	104	104	Uses the * character

#	Item	Notes	Length	Starting Position	Ending Position	Format
25	Allowed/ Disallowed flag (Figure 1)	<p>This field indicates if the current record (field #9) together with its associated diagnoses are Allowed or Disallowed for risk adjustment.</p> <p>“A”: The record together with its associated diagnoses are Allowed for risk adjustment.</p> <p>“D”: The record together with associated diagnoses are Disallowed for risk adjustment.</p> <p>Blank: Voids and Chart Review Deletes that have an EDS submission dates prior to the risk adjustment deadline.</p> <p>“N”: Designated for all Service Types “N”. The record together with associated diagnoses are not applicable for risk adjustment</p>	1	105	105	Alpha Numeric
26	Delimiter		1	106	106	Uses the * character

#	Item	Notes	Length	Starting Position	Ending Position	Format
27	Allowed/ Disallowed Reason Code (Figure 1)	<p>If applicable, this field will indicate why the current record and its associated diagnoses are Disallowed for risk adjustment; or will indicate that diagnoses which previously was Disallowed for risk adjustment are now Allowed for risk adjustment based on an updated quarterly CPT/HCPCS list.</p> <p>“H”: The current record and its associated diagnoses are Disallowed for risk adjustment due to CPT/HCPCS. This value is applicable to only Service Types “O”, “P” and “D”.</p> <p>“T”: The current record and its associated diagnoses are Disallowed for risk adjustment due to Type of Bill. This value is applicable to only Service Types “O”.</p> <p>“D”: The current record and its associated diagnoses are Disallowed due to the final year-specific risk-adjustment payment deadline</p> <p>If the current record and its associated diagnoses are Disallowed for both Type of Bill and CPT/HCPCS code, reason code “T” will be reported. This is only applicable to Service Types “O”.</p> <p>“Q”: The current record and its associated diagnoses are now Allowed due to CPT/HCPCS quarterly update. This value is only applicable to reprocessed Service Types “O”, “P” and “D”.</p> <p>Blank: The current record and its associated diagnoses are Allowed for risk adjustment.</p> <p>“N”: The current record and its associated diagnoses are not applicable for risk adjustment. This is applicable records with Service Types “N”.</p> <p>Order of Hierarchy: N> D> T> H</p>	1	107	107	Alpha Numeric

#	Item	Notes	Length	Starting Position	Ending Position	Format
28	Delimiter		1	108	108	Uses the * character
29	Diagnoses ICD	ICD code for All the diagnoses (9 or 0). “9”: ICD-9 or “0”: ICD-10	1	109	109	Alpha Numeric
30	Delimiter		1	110	110	Uses the * character
31	Diagnosis Code	ICD-9 codes will be accepted prior to the ICD-10 implementation date. Only ICD-10 codes will be accepted starting with ICD-10 implementation date.	7	111	117	Alpha Numeric
32	Delimiter		1	118	118	Uses the * character
33	Add or Delete flag (Table 6)	This will flag a diagnosis code as: “A”: Diagnoses are added. “D”: Diagnoses are deleted. “N”: Diagnoses that are not applicable for adding and/or deleting.	1	119	119	Alpha Numeric
34	Delimiter		1	120	120	Uses the * character
35	Diagnosis Codes & Delimiters & Add/Delete flags for 37 diagnoses	This field represents up to 37 subsequent diagnoses, for a total of 38 diagnoses and add/delete flags per ICN. Any diagnoses beyond 38 will wrap around in the next line of the report with repeated detail lines except the diagnoses.	370	121	490	Alpha Numeric

Table 29: Trailer

#	Item	Notes	Length	Starting Position	Ending Position	Format
1	Record Type	9: Trailer	1	1	1	Numeric, no commas and/or decimals
2	Delimiter		1	2	2	Uses the * character
3	Report ID	Value is "MAO-004"	7	3	9	Alpha Numeric
4	Delimiter		1	10	10	Uses the * character
5	Medicare Advantage Contract ID	Medicare Contract ID assigned to the submitting contract	5	11	15	Alpha Numeric
6	Delimiter		1	16	16	Uses the * character
7	Total Number of Records	Count of detail records on this report	18	17	34	Numeric, no commas and/or decimals
8	Delimiter		1	35	35	Uses the * character
9	Filler		465	36	500	Spaces

Appendix I: Glossary

Table 30: Glossary

Term	Definition
Active Status of a Record	A record is in Active Status if it is the most recent accepted version of a given encounter data or chart review record (e.g., if an accepted Original EDR is replaced by an accepted EDR, then the replacement EDR is Active, and the Original EDR is Non-Active).
Allowed	Eligible for risk adjustment.
Chart Review Records (CRRs)	A report of diagnoses for payment that are associated with an encounter data record and submitted to the CMS Encounter Data System in the 837-P or 837-I 5010 format identified as a chart review through the PWK segments 01/02 in loop 2300 populated with values '09' and 'AA.'
CRR Adds	A chart review record that is adding risk adjustment eligible diagnoses for payment to a beneficiary's overall set of encounter data.
CRR Deletes	A chart review record that is deleting risk adjustment eligible for diagnoses from an existing encounter data record or chart review record.
Current Procedural Terminology (CPT) Code	CPT is a five-digit medical code set that is used to report medical, surgical, and diagnostic procedures and services rendered by healthcare professionals.
Disallowed	CMS will NOT use any of the header diagnoses on the record for risk adjustment.
Encounter Data Families	An Encounter Data Family is comprised of one or more linked encounter records. An Encounter Data Family always begins with an original EDR or CRR-Add, and may be followed by one or more linked records submitted by the MAO for the purpose of replacing, voiding, adding and/or deleting diagnoses from the family.
Encounter Data Record (EDRs)	A report of items or services provided to a plan enrollee submitted to the CMS Encounter Data System in the 837-P or 837-I 5010 format and not identified as a chart review through the PWK segments 01/02 in loop 2300 populated with values '09' and 'AA.'

Term	Definition
HCPCS Code	The Healthcare Common Procedure Coding System (HCPCS) is a collection of codes that represent procedures, supplies, products, and services which may be provided to Medicare beneficiaries and to individuals enrolled in private health insurance programs.
Internal Control Number (ICN)	Upon acceptance encounters are issued a unique 13-digit tracking number known as the Internal Control Number (ICN). Digits 1-2 represent the year, digits 3-5 represent the Julian date and digits 6-13 represents a unique sequence number.
Linked CRR Adds	A Chart Review Record that is adding risk adjustment eligible diagnoses for payment and identifying the specific items or services those diagnoses are associated with as reported on an existing encounter data record, or associating the diagnoses with a previously reported chart review record.
Non-Active Status of a Record	A record is in Non-Active Status if it is not the most recent accepted version of a given encounter data or chart review record (e.g., if an accepted Original EDR is replaced by an accepted EDR, then the replacement EDR is Active, and the Original EDR is Non-Active).
Risk Adjustment Data	<p>All data used in the development and application of a risk adjustment payment model. This includes diagnosis codes, and information about items and services provided to MA or PACE plan enrollees. Specifically, to the extent required by CMS, risk adjustment data must account for the following as defined in 42 CFR 422.310(c)(1):</p> <ol style="list-style-type: none"> 1. Items and services covered under the original Medicare program. 2. Medicare covered items and services for which Medicare is not the primary payer. 3. Other additional or supplemental benefits that the MA organization may provide.
Unlinked CRRs	A Chart Review Record that is adding risk adjustment eligible diagnoses for payment and not identifying the specific items or services those diagnoses are associated with as reported on an existing encounter data record.