Payment Year 2012
Medicare Advantage (MA) Contract-Specific Risk Adjustment Data Validation (RADV)

Payment Error Calculation Methodology

May 13, 2025

Payment Year 2012 MA Contract-Specific RADV
Payment Error Calculation Methodology

Table of Contents

Payment Year 2012 MA Contract-Specific RADV
Payment Error Calculation Methodology

1 Purpose

This document communicates the Centers for Medicare & Medicaid Services (CMS) payment error calculation methodology for payment year (PY) 2012 contract-specific Risk Adjustment Data Validation (RADV) audits.[1]

2 Background

Section 1853(a)(1)(C) of the Social Security Act (the Act) requires that CMS calculates risk adjusted payments made to Medicare Advantage Organizations (MAOs). Risk adjustment strengthens the Medicare Advantage (MA) program by ensuring that appropriate payments are made to MAOs based on the health status and demographic characteristics of their enrolled beneficiaries. MAOs submit enrollees' diagnosis data[2] to CMS until the final risk adjustment data submission deadline for each payment year. Information about how CMS calculated PY 2012 risk adjusted payments—including risk adjustment factors and CMS hierarchical condition categories (CMS-HCCs)—was published in the Announcement of Calendar Year (CY) 2012 Medicare Advantage Capitation Rates and Medicare Advantage and Part D Payment Policies and Final Call Letter and Request for Information (April 4, 2011).[3] Detailed information about MA risk adjustment and enrollee risk score calculation is published each year by CMS and applies to future payment years.[4]

CMS conducts RADV audits pursuant to 42 CFR Sections 422.2 and 422.310(e). Section 422.310(e) requires MAOs to submit medical records (MRs) to CMS for validation of risk adjustment data. Contract-specific RADV audits are CMS' main corrective action to identify overpayments made to MAOs when the documentation in MRs does not support the diagnoses reported by MAOs for the calculation of risk adjusted payments.[5] In PY 2012, CMS selected a sample of enrollees and calculated an overpayment amount using the methodology described in this paper.

---

[1] In the past, CMS referred to a MA contract-level RADV audit (now referred to as a contract-specific RADV audit) using the acronym CONXX, where XX referred to the two digit payment year. The acronym may still be used in CMS systems for a limited time until CMS can make terminology updates.

[2] Payments to MAOs for a given PY are required to be substantiated by diagnoses documented in MRs from face-to-face encounters with dates of service in the year prior to the PY (i.e., data collection year) from an acceptable data source, and coded according to ICD coding guidelines (Medicare Managed Care Manual, Chapter 7- Risk Adjustment).

[3] https://www.cms.gov/medicare/health-plans/medicareadvtgspecratestats/downloads/announcement2012.pdf

[4] https://www.cms.gov/medicare/payment/medicare-advantage-rates-statistics/announcements-and-documents. These documents comprise the Medicare Advantage (MA), and Medicare+Choice (M+C) advance notices of methodological changes; announcements issued with MA or M+C rates; and special reports.

[5] In issuing these results, CMS notes the following: As part of the RADV audits for payment year 2012, agency auditors reviewed medical records to determine whether MAOs had submitted diagnosis codes in accordance with the ICD Guidelines for Coding and Reporting. However, the agency auditors who reviewed the medical records did so under constraints that medical record coders typically do not face. For example, the auditors were limited to reviewing only the specific medical records submitted by plans, and they could not query providers for clarification

3 Payment Error Calculation Methodology

RADV audits confirm the presence of valid diagnoses that map to CMS-HCCs in MR documentation submitted by an MAO. A risk adjustment discrepancy is identified for an audited CMS-HCC when any of the following conditions are true:

- An original CMS-HCC, based on diagnosis code data self-reported by an MAO before the data submission deadline(s), used for payment for a sampled enrollee was not supported by diagnoses found in valid MRs during the RADV audit process.
- No valid MRs were submitted for the sampled enrollee.
- No MRs were submitted for the sampled enrollee.

Each RADV audit report issued by CMS will communicate a determination for each audited CMS-HCC. Table 1 lists and explains the possible outcomes for audited CMS-HCCs for PY 2012 RADV audits.

Table 1: Possible Outcomes for Audited CMS-HCCs

Audit Outcome Label	Audit Outcome Description
Confirmed	The audited CMS-HCC was validated by a diagnosis found in a valid MR for the enrollee.
Confirmed Higher	The audited CMS-HCC is a CMS-HCC included in a hierarchy and a diagnosis, found in a valid MR submitted for the enrollee, validated a higher level of CMS-HCC within the hierarchy.
Discrepant	The audited CMS-HCC could not be validated.
Discrepant Lower	The audited CMS-HCC is a CMS-HCC included in a hierarchy and only a lower level of CMS-HCC within the hierarchy was validated by a diagnosis found in a valid MR submitted for the enrollee.

or collect additional records. The auditors also could not adapt their procedures to address specific MAO and provider practices, such as pre-population of problem lists and past medical histories. To account for these limitations, auditors were provided with internal guidance for applying the ICD Guidelines in the unique context of RADV. This guidance instructed auditors to make various assumptions, on a limited basis, that favored validating the diagnosis codes submitted by plans, particularly in situations that otherwise would have necessitated querying the provider. However, based on the experience gained in conducting audits to date, the agency has determined that this additional guidance is unnecessary, and in certain instances, may have led to results inconsistent with the ICD Guidelines that the guidance was intended to reflect. The agency therefore does not intend to use such guidance in future audits. While CMS made certain coding accommodations in the course of performing the 2012 RADV Audits due to the constraints of the process, such accommodations were limited to the context of the RADV Audit process and did not (and do not) change CMS's longstanding requirement in the ordinary Risk Adjustment process that all diagnosis codes submitted must result from a face-to-face visit, be documented in the medical record, and be coded according to the ICD Guidelines and the Coding Clinic for ICD-10-CM.

Administrative Exception	CMS granted an administrative exception for the audited CMS-HCC; no impact on payment error calculation.

All enrollee risk score calculations during a RADV audit use the published model for the relevant PY, including relevant normalization, coding intensity adjustment, and frailty factors (if applicable). CMS uses data from CMS systems of records and post-RADV MR review results of audited CMS-HCCs to calculate payment errors for sampled enrollees.[6]

3.1 Payment Error Calculation for Each Sampled Enrollee

CMS calculated the "RADV enrollee total payment error" for each enrollee selected in the RADV audit sample by completing the following steps:

1. Applying medical record selection logic (see Appendix A) to choose the best, valid MR, submitted by the MAO for RADV,[7] that supports each audited CMS-HCC.
2. Running the sampled enrollee's diagnosis codes, which are abstracted by CMS from valid MRs selected in #1 above, and other necessary data for the enrollee, sourced from CMS systems of records at the time the sample was selected, through the relevant PY's published MA payment model to determine the "RADV enrollee risk score".[8]
3. Calculating "RADV monthly enrollee risk payment amounts" by multiplying the "RADV enrollee risk score" after normalization, adjustment, and blending (if applicable) by the appropriate county rate for months in which the sampled enrollee was covered by the plan and not in an End Stage Renal Disease (ESRD) or hospice status.

---

[6] Data from CMS systems of records that contributes to MA payment error calculations may include items such as the following: Health Insurance Claim Number (HICN), Date of Birth, Sex, Original Reason for Entitlement Code (OREC), and Medicaid Dual Status. A CMS contract-specific RADV audit focuses on the health conditions (i.e. diagnoses) self-reported by an MAO for the purpose of receiving risk adjusted payments, not on confirming other data/factors from CMS' systems of records that impact payments.

[7] No payment error will be calculated for any sampled enrollees and/or audited CMS-HCCs for which CMS has approved a Hardship Exception.

[8] If CMS abstracts a diagnosis code (that maps to a CMS-HCC) that was not previously submitted by the MAO for risk payment prior to the final risk adjustment data submissions deadline, and such a diagnosis code was found in a valid MR that was found by CMS in the best record that substantiated the highest manifestation of an audited CMS-HCC, then CMS included the "additional CMS-HCC" when calculating a specific RADV sampled enrollee's "RADV enrollee risk score". Note, however, that the crediting of "additional CMS-HCCs" can only offset overpayment amounts and can never result in additional risk payments to an MAO, since this would circumvent the final risk adjustment data submission deadlines described at § 422.310(g)(2)(ii). Further, an MAO is not permitted to appeal "additional CMS-HCC" determinations found under the RADV audit for which it did not receive credit (79 Fed. Reg. 29932, May 23, 2014).

4. Summing the "RADV monthly enrollee risk payment amounts" and applying all other relevant payment components[9] and adjustments to determine the "RADV Enrollee Risk Payment Amount".
5. Calculating "RADV enrollee monthly payment error" by subtracting each month's "RADV monthly enrollee risk payment amount" from the "original monthly payment amount" that was previously received by the MAO.
6. Summing the "RADV enrollee monthly payment error" amounts for the PY to determine the "RADV enrollee total payment error".

Note that the "RADV enrollee monthly payment error" amount can be positive, $0, or negative. When positive, an overpayment condition exists related to the sampled enrollee.

3.2 Total Overpayment Amount

The total overpayment amount for PY 2012 RADV audit is the sum of the "RADV enrollee total payment error" amounts for all sampled enrollees. If the sum is greater than $0, an overpayment condition exists, and CMS will initiate collection activities. If the sum is equal to or less than $0, then no overpayment condition exists. In this scenario, because the purpose of RADV audits is to identify overpayments after the final risk adjustment data submission deadline (and not to reopen submission deadlines for CMS to make additional payments), a RADV audit will not result in additional payments being made to an MAO.

4 RADV and the Requirement to Self-Report and Return Overpayments

In accordance with section 1128J(d) of the Act and 42 CFR 422.326, an MAO is required to report and return any plan-identified overpayments within 60 days of being identified. However, as a contract selected for a CMS PY 2012 RADV audit and in accordance with 42 CFR 422.326(d), please suspend the reporting of overpayments to the Risk Adjustment Overpayment Reporting (RAOR) module in Health Plan Management System (HPMS) and the submission of data corrections in the Risk Adjustment Processing System (RAPS) for PY 2012 for enrollees included in this audit's sampling frame (which includes the sampled enrollees) until further notice. For plan-identified overpayments related to enrollees in the subject MA contract that are not included in the sampling frame for this RADV audit, your organization is required to report and return any potential overpayment to CMS in accordance with section 1128J(d) of the Act and 42 CFR 422.326.

5 CMS Email Support Resources

The Points of Contacts (POCs) associated with an audited MA contract may request technical support regarding use of the CDAT system by sending an email to the CDAT Technical Support Email Box at RADVCONTechsupport@radvcdat.com. Individuals with general questions about CMS' MA contract-specific RADV audits may send an email to radv@cms.hhs.gov.

[9] Other relevant payment components include rebates, premiums, and other factors.

Appendix A: Medical Record Selection Logic

CMS used the logic below to choose the valid MR that best supported each audited CMS-HCC. CMS generally relied on the MAO's ranking of MRs but deviated from the MAO's ranking when doing so resulted in a more beneficial audit finding for the MAO for a given audited CMS-HCC (i.e., when a lower ranked MR substantiated a higher manifestation of an audited hierarchical CMS-HCC, and a higher ranked MR did not). For each audited CMS-HCC, CMS considered the MAO's MR rankings and chose the highest ranked MR with the best result as the single best MR for the audited CMS-HCC, in the following order:

1. The MR confirmed a higher manifestation of an audited hierarchical CMS-HCC.
2. The MR confirmed the audited HCC.
3. The MR did not confirm the audited HCC but confirmed a lower manifestation of an audited hierarchical HCC.

If no MR substantiated the audited HCC, then the HCC was determined to be discrepant.

The single best MR was used by CMS when calculating the overpayment. Note that in bullets #1 and #2, above, if additional HCCs were identified by CMS in the single best MR, then they were credited to the MAO.