



Date: June 24, 2026

RE: 2024 Benefit Year HHS Risk Adjustment Data Validation (HHS-RADV) Results

The Centers for Medicare & Medicaid Services (CMS) is making available summary information on issuers' 2024 benefit year HHS-RADV results. The 2024 benefit year HHS-RADV error rates will be applied to 2024 benefit year plan liability risk scores and risk adjustment State transfers.¹ The 2024 benefit year HHS-RADV adjustments to 2024 benefit year risk adjustment State transfers will be released by the end of July 2026.² This memo contains a summary of the 2024 benefit year HHS-RADV results, and information to assist issuers in understanding their results.³

For information on the 2024 benefit year HHS-RADV error estimation methodology and the incorporation of all relevant regulations and previous guidance that set the error estimation methodology, refer to the 2024 Benefit Year HHS-RADV Protocols.⁴

1. Key Findings of the 2024 Benefit Year HHS-RADV Results

Key Finding #1: HHS-RADV Participation decreased.

The overall HHS-RADV participation rate, shown in Table 1, calculated as a percentage of all issuers with risk adjustment covered plans in the market, decreased between the 2023 benefit year and 2024. This overall decline was primarily driven by a drop in the number of small issuers selected for random and targeted sampling. In contrast, the participation of large issuers remained stable. All larger issuers over 30,000 billable member months were required to participate in both benefit years of HHS-RADV if they did not meet other exemption criteria.

¹ See the Amendments to the HHS-Operated Risk Adjustment Data Validation (HHS-RADV) Under the Patient Protection and Affordable Care Act's HHS-Operated Risk Adjustment Program Final Rule; 85 FR 76979 at 77002-77005 (December 1, 2020) (2020 HHS-RADV Amendments Rule).

² See Table 4 in the Key Dates for Calendar Year 2026 document for information on the updated timing of the Summary Report of 2024 Benefit Year Risk Adjustment Data Validation Adjustments to Risk Adjustment Transfers available at: <https://www.cms.gov/files/document/cy26-key-dates-tables.pdf>

³ Issuers who participated in 2024 benefit year HHS-RADV will receive issuer-specific and enrollee-specific results in the HHS-RADV Audit Tool at the same time this memo is released. Issuers received the 2024 benefit year issuer-specific demographic and enrollment (D&E) and specific prescription drug (RXC) letters and reports in the HHS-RADV Audit Tool in May 2026.

⁴ See the 2024 Benefit Year ACA HHS Risk Adjustment Data Validation (HHS-RADV) Protocols (May 20, 2025) (2024 Benefit Year HHS-RADV Protocols) available at: https://regtap.cms.gov/reg_librarye.php?i=5881

Table 1: Issuer Participation Across 2024 and 2023 Benefit Years

RADV Year	Count		Percent	
	2024	2023	2024	2023
All Issuers	589	596	100.0%	100.0%
All Issuers Participating in HHS-RADV	436	471	74.0%	79.0%
Small* Issuers Participating in HHS-RADV	40	74	6.8%	12.4%
Large** Issuers Participating in HHS-RADV	396	397	67.2%	66.6%

Notes:

*Small Issuer: An issuer with greater than 500 and less than or equal to 30,000 total billable member months statewide, not exempted from participating in HHS-RADV for any reason, and selected to participate via random or targeted sampling.

**Large Issuer: An issuer with more than 30,000 total billable member months Statewide, mandated to participate in the annual HHS-RADV.

Key Finding #2: There were several commonly miscoded HCCs in 2024 benefit year HHS-RADV. In the 2024 benefit year, CMS identified several HCCs that were most frequently not validated in issuers' audit results. Table 2 lists the five HCCs with the lowest Validated Percentage, limited to those with a minimum count of 150 across the full IVA sample across all issuers. Table 3 lists the five most commonly occurring HCCs across the full IVA samples, along with their Validated count and Validated Percentage. For a full listing of 2024 benefit year HCCs with validation rates, see Appendix D. 2024 Benefit Year HHS-RADV HCC Validation.

Table 2: 2024 Benefit Year Commonly Miscoded Single HCCs Among IVA-Reviewed Sample Enrollees⁵

HCC	HCC Label	All Enrollees included in Error Estimation Calculation	Validated	Validated Percentage
187	Chronic Kidney Disease, Stage 5	158	53	34%
13	Thyroid Cancer, Melanoma, Neurofibromatosis, and Other Cancers and Tumors	444	189	43%
151	Monoplegia, Other Paralytic Syndromes	204	88	43%

⁵ Note that this table is provided at the single HCC level, rather than the de-duplicated Super HCC level.

HCC	HCC Label	All Enrollees included in Error Estimation Calculation	Validated	Validated Percentage
11	Colorectal, Breast (Age < 50), Kidney, and Other Cancers	1147	526	46%
234	Traumatic Amputations and Amputation Complications	198	93	47%

Table 3: 2024 Benefit Year Commonly Submitted HCCs Among IVA-Reviewed Sample Enrollees

HCC	HCC Label	All Enrollees included in Error Estimation Calculation	Validated	Validated Percentage
8	Metastatic Cancer	11547	9819	85%
130	Heart Failure	10227	8948	87%
127	Cardio-Respiratory Failure and Shock, Including Respiratory Distress Syndromes	10103	8683	86%
20	Diabetes with Chronic Complications	9815	8521	87%
2	Septicemia, Sepsis, Systemic Inflammatory Response Syndrome/Shock	9637	8507	88%

Key Finding #3: National mean group failure rates between 2024 and 2023 benefit years HHS-RADV decreased for the low and medium groups, while the high group experienced a slight increase. Standard deviation changes were mixed.

The national weighted mean of the group failure rates decreased for the low and medium groups between benefit years, while the high group saw a marginal increase.⁶ For the low and medium groups, this continues the decreasing trend observed between 2022 and 2023 benefit years HHS-RADV results.⁷ Figure 1 compares the distributions of the failure rate groups in the 2023 and 2024 benefit years of

⁶ See Appendix A for additional detail on group failure rates.

⁷ See the 2023 HHS-RADV results, available at: <https://www.cms.gov/files/document/by2023-hhs-radv-results-memo.pdf>

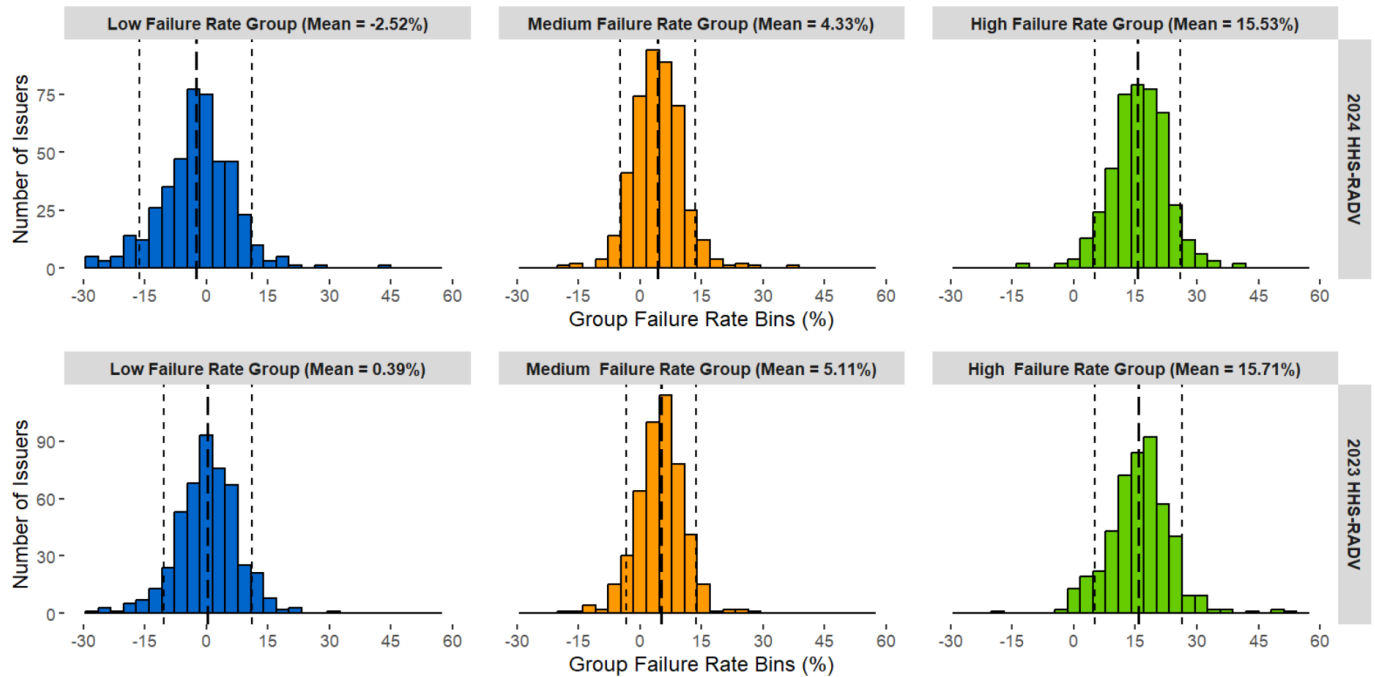
HHS-RADV. Specifically, the low failure rate group experienced the largest decrease of 2.96 percent, followed by the medium failure rate group with a decrease of 0.77 percent. Conversely, the high failure rate group experienced a slight increase of 0.02 percent.

In addition, for 2024 benefit year HHS-RADV, the weighted mean group failure rate for the low failure rate group is -2.57 percent. This negative value indicates that, on average across all issuers nationally, the IVA (or SVA, as applicable) medical record review identified more HCCs in the low failure rate group than were reported to EDGE for that group. In this case, the negative failure rate constraint policy finalized in the 2020 HHS-RADV Amendments rule⁸ replaces any negative group failure rate (issuer, or national mean) with zero for the purpose of calculating group adjustment factors and subsequent issuer error rates. The 2024 benefit year of HHS-RADV is the first benefit year where natural data trends have resulted in a negative national mean group failure rate for any of the three failure rate groups. As such, for any issuers who are outliers in the low failure rate group in the 2024 benefit year of HHS-RADV, their group adjustment factors have been calculated as the difference between their group failure rate (if positive, and accounting for the sliding scale adjustment) and zero. Furthermore, any issuers who are negative failure rate outliers in the low failure rate group have received group adjustment factors of zero for the 2024 benefit year of HHS-RADV. The application of the negative failure rate constraint is therefore working as intended to mitigate the impact of adjustments that would have resulted from newly found HCCs rather than from high validation rates.

Furthermore, the standard deviation decreased slightly in the high failure rate group, increased slightly in the medium failure rate group, and increased moderately in the low failure rate group. As a result, in the 2024 benefit year, there is a substantially wider distribution of failure rates that are centered closer to the mean for the low failure rate group compared to the 2023 benefit year, indicating increased variability of failure rates in the low failure rate group for the 2024 benefit year.

⁸ The negative failure rate constraint methodology was established in the 2020 HHS-RADV Amendments rule at 85 FR 76979 and accommodated the possibility of a negative mean.

Figure 1: Distribution of Group Failure Rates Across 2024 Benefit Year and 2023 Benefit Year HHS-RADV



Key Finding #4: The proportion of non-zero error rate issuers decreased in 2024 benefit year HHS-RADV compared to 2023 benefit year HHS-RADV, reflecting declines in both positive and negative error rates.

The 2024 benefit year of HHS-RADV had a lower proportion of issuers with non-zero error rates compared to the 2023 benefit year, as detailed in Table 4. This overall decline was driven by a reduction in issuers with negative error rates, as well as a slight decrease in the proportion of issuers with positive error rates between 2023 and 2024.

Table 4: Outlier Issuers Across 2024 and 2023 Benefit Years

RADV Year	Count		Percent	
	2024	2023	2024	2023
All Issuers Participating in HHS-RADV	436	471	100.0%	100.0%
Issuers with Zero Error Rates	359	363	82.3%	77.1%
Issuers with Non-Zero Error Rates	77	108	17.7%	22.9%
Issuers with Negative Error Rates	32	59	7.4%	12.5%
Issuers with Positive Error Rates	45	49	10.3%	10.4%

Further analysis reveals that the decline in negative error rate issuers was driven by the interaction between the existing negative failure rate constraint in the error estimation methodology and the 2024 benefit year’s negative weighted mean group failure rate (discussed in Key Finding #3). This negative weighted mean triggered new outcomes under the constraint: several issuers identified as group-level

outliers had their group adjustment factors constrained to zero (see details in Key Finding #5). If an issuer was constrained to zero in one group (e.g., low) and was not flagged as an outlier in the remaining two groups (e.g., medium and high), this resulted in a final calculated error rate of exactly zero. Because these adjustments occurred more frequently on the negative side of the distribution, they directly resulted in the lower proportion of negative error rate issuers reported in Table 4.

Key Finding #5: Between 2023 and 2024 benefit year HHS-RADV, the dispersion of failure rate group outliers between the different outlier thresholds is nearly identical.

Table 5 provides a closer look at how outlier issuers in each failure rate group were dispersed between the different outlier thresholds in each failure rate group in the 2023 and 2024 benefit years of HHS-RADV. In the 2023 benefit year, 90.3 percent of outliers fell between 1.645 and 3 standard deviations of the weighted mean failure rate for the failure rate group, and 9.7 percent of outliers fell outside of 3 standard deviations of the weighted mean failure rate for the failure rate group. In 2024 benefit year HHS-RADV, a near identical proportion of outliers (91.5 percent) fell within 1.645 and 3 standard deviations of the weighted mean failure rate for the failure rate group and a near identical proportion of outliers (8.5 percent) fell outside of 3 standard deviations of the weighted mean failure rate for the failure rate group. Importantly, this comparison reflects patterns at the failure rate group level, observed prior to the application of the negative failure rate constraint.

Table 5: 2023 and 2024 Benefit Years Outlier Counts⁹ by Outlier Identification Threshold (Number of Outliers)

Failure Rate Group	Within 1.645 and 3 SD – BY23	Outside 3 SD – BY23	Total – BY23	Within 1.645 and 3 SD – BY24	Outside 3 SD – BY24	Total – BY24
Low	41	4	45	41	3	44
Medium	42	6	48	37	4	41
High	47	4	51	40	4	44
Total	130 (90.3%)	14 (9.7%)	144	118 (91.5%)	11 (8.5%)	129

Furthermore, as discussed in Key Finding #4, not all group-level outliers shown in Table 5 ultimately received an adjustment. Due to the interaction between the negative failure rate constraint and 2024 benefit year negative weighted mean, many of these issuers had their group adjustment factors constrained to zero. For instance, of the 44 outliers in the low failure rate group in the 2024 benefit year, 31 of them are labeled as outliers but will receive a group adjustment factor of zero after the application of the negative failure rate constraint. Additionally, 12 of these 31 issuers were not outliers in the medium or high groups. As a result, their final calculated error rate was exactly zero, since their adjustment factors across all three groups ultimately equaled zero.

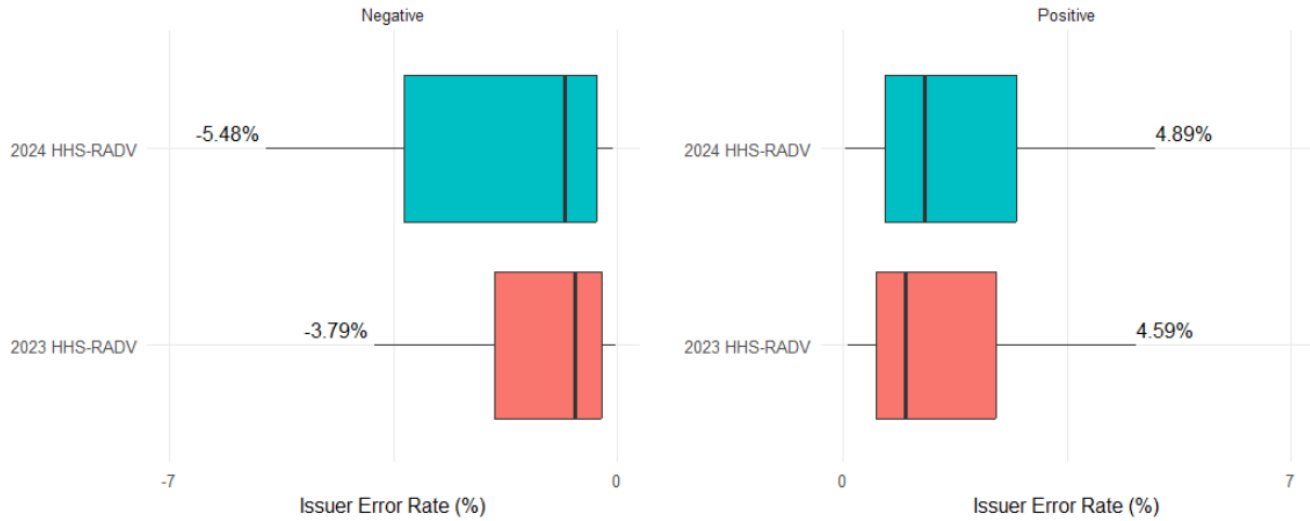
Key Finding #6: The 2024 benefit year HHS-RADV results reflected an expansion in the spread of both positive and negative error rates.

Figure 2 illustrates the distribution of positive and negative error rates for the 2023 and 2024 benefit years of HHS-RADV, excluding zero error rates that resulted from applying negative failure constraints to failure rate group outliers. The distribution of issuer error rates in 2024 benefit year shows an increase

⁹ An issuer can be an outlier in up to three different Failure Rate Groups.

in magnitude compared to 2023 benefit year on both the negative and positive sides, with the median values shifting outward. In addition, the interquartile range (box size) is larger in 2024 benefit year, indicating increased variability in error rates.

Figure 2: Distribution of Non-Zero Error Rates Across 2023 and 2024 HHS-RADV Benefit Years¹⁰



Key Finding #7: The number of State market risk pools impacted in 2024 benefit year HHS-RADV decreased from the number impacted in 2023 benefit year HHS-RADV.

In 2024 benefit year HHS-RADV, the identification of outliers impacted 32 States’ individual market non-catastrophic risk pools, 28 States’ small group market risk pools, and 18 States’ catastrophic risk pools. These numbers are down from the 2023 benefit year, for which 36 States were impacted in the individual market non-catastrophic risk pools, 35 States in the small group market risk pools, and 20 States in the catastrophic risk pools.

Table 6: State Market Risk Pools Being Impacted Across 2023 and 2024 Benefit Years

HHS-RADV Year	Individual (Excluding Catastrophic)	Small Group	Catastrophic
2024 HHS-RADV Results	32	28	18
2023 HHS-RADV Results	36	35	20

¹⁰ Figure 2 illustrates the distribution of error rate values using a boxplot. The whiskers, which extend from the edge of the boxes, depict the range of error rate values excluding any extreme outliers. The tip of each whisker, as annotated in the figure, is calculated as the largest positive error rate value lower than $Q3 + 1.5 \times IQR$ for positive error rate values and calculated as the smallest negative error rate value greater than $Q1 - 1.5 \times IQR$ for negative error rate values. IQR represents the interquartile range and is calculated as $Q3 - Q1$.

2. 2024 Benefit Year HHS-RADV Results and Reports

The HHS-RADV Audit Tool¹¹ provides the following documents for 2024 benefit year HHS-RADV results:¹²

- 1. “National Program Benchmarks – 2024 Benefit Year HHS-RADV (Appendix A)”**
Provides the national program benchmarks for failure rate group means and confidence intervals, and summary statistics based on all issuers’ results used to establish the national failure rate group metrics for the 2024 benefit year HHS-RADV results.
- 2. “2024 Benefit Year Risk Adjustment State Market Risk Pool Weighted Average HHS-RADV Error Rates (Appendix B)”**
Provides information that shows which State market risk pools are impacted by 2024 benefit year HHS-RADV error rates.¹³ State market risk pools will have 2024 benefit year risk adjustment State transfers impacted if there is at least one error rate outlier in the State market risk pool in the 2024 benefit year of HHS-RADV.
- 3. “2024 Benefit Year HHS-RADV Failure Rate Group Definitions (Appendix C)”**
Provides a listing of HCCs, the associated Super HCC, and the group detail (i.e., Low Failure Rate Group, Medium Failure Rate Group, and High Failure Rate Group) for the 2024 benefit year.
- 4. “2024 Benefit Year HHS-RADV HCC Validation (Appendix D)”**
Provides the validation count and rate for each single HCC based on all issuers’ results for 2024 benefit year HHS-RADV.
- 5. 2024 Benefit Year “Issuer Metrics” Report**
Provides issuer-specific results for the 2024 benefit year HHS-RADV on each HIOS ID’s HCC group failure rates and error rate, if applicable. This is available to issuers in the History and Results tab of the HHS-RADV Audit Tool. Issuers with more than one HIOS ID will receive separate Issuer HCC Group Metrics Reports for each HIOS ID.
- 6. 2024 Benefit Year “Enrollee Metrics” Report**
Provides issuer-specific, enrollee-level findings for each HIOS ID’s HHS-RADV sampled enrollees’ HCCs and applicable adjustments for the 2024 benefit year HHS-RADV.¹⁴ This is available to issuers in the History and Results tab of the HHS-RADV Audit Tool.

To help issuers understand the results, CMS is also providing a 2024 Benefit Year HHS-RADV Results Job Aid, which includes definitions for each of the data fields in the results that will be available in the HHS-RADV Audit Tool. The 2024 Benefit Year HHS-RADV Results Job Aid includes an addendum,

¹¹ The HHS-RADV Audit Tool can be accessed by issuers (Issuer SO, Back-up SO, and RADV coordinators) at: <https://pay-cms-fmps.my.site.com/HHSRADVAuditTool>.

¹² IVA Entities will have access to this memo and the HHS-RADV Results Job Aid, but they will not receive issuer specific results (i.e., documents 5 and 6 in the list). Issuers may choose to share their issuer specific results with their IVA Entities.

¹³ We note that the state market risk pool weighted average risk score error rates account for all risk adjustment EDGE discrepancies to date. The information on impacted state market risk pools is subject to change as it does not take into account any adjustments for any potential actionable HHS-RADV discrepancies or successful HHS-RADV appeals.

¹⁴ The HIOS ID’s error rate may be a zero or a non-zero rate.

called “Error Rate Calculation Example,” that provides step-by-step directions for calculating an issuer’s 2024 Benefit Year HHS-RADV error rate.

3. Impact of HHS-RADV Error Rates and Outlier Status on 2024 Benefit Year Risk Adjustment State Transfers

The impact of a risk score error rate on an issuer’s risk adjustment State transfers depends on whether the issuer was identified as an outlier with a non-zero error rate or whether additional outliers with a non-zero error rate exist in the state market risk pool. As previously mentioned, issuers’ 2024 benefit year HHS-RADV error rates will be used to adjust 2024 benefit year plan liability risk scores and risk adjustment State transfers.¹⁵

- **Zero Error Rate Issuers:** Exempt issuers, non-outlier issuers, and issuers who are negative outliers in only the low failure rate group will receive a zero error rate.
 - Zero error rate issuers will not have an adjustment made to their 2024 benefit year plan liability risk scores. However, the application of the 2024 benefit year HHS-RADV non-zero error rates to outlier issuers’ 2024 benefit year plan liability risk scores affect the State average risk score for a State market risk pool. Due to the budget neutral nature of the HHS-operated risk adjustment program, outliers with a zero error rate, non-outliers and exempt issuers’ 2024 benefit year risk adjustment State transfers may still be subject to HHS-RADV adjustments if other issuers in their State market risk pool are identified as outliers in the 2024 benefit year of HHS-RADV.
- **Non-Zero Error Rate Issuers:** Other outlier issuers will receive non-zero error rates that could be positive or negative.^{16,17}

We provide the weighted average risk score error rates by State market risk pool in Appendix B so that issuers can compare this information to the data that was released in the Summary Report on Individual and Small Group Market Risk Adjustment Transfers for the 2024 Benefit Year.¹⁸ The weighted average risk score error rates are calculated by taking the weighted average of issuers’ 2024 benefit year HHS-RADV error rates for each State market risk pool, weighted by each issuer’s billable member months and plan liability risk scores. To estimate the impact of averaged error rates and their HHS-RADV adjusted 2024 benefit year risk adjustment transfers, issuers can use the Appendix B data in conjunction with issuer-specific 2024 benefit year risk adjustment data, the State tables, and the payment transfer denominator amounts that were included in the Summary Report on Individual and Small Group Market Risk Adjustment Transfers for the 2024 Benefit Year.¹⁹

¹⁵ See supra note 1.

¹⁶ Issuers with failure rates that fall outside of one or more of the failure group confidence intervals and have at least 30 Super de-duplicated HCCs in the applicable failure rate group are considered outliers.

¹⁷ As finalized in the 2024 Payment Notice, issuers who exited all markets in a state after the 2024 benefit year and who are identified as error rate outliers in 2024 benefit year HHS-RADV will have their 2024 benefit year HHS-RADV error rates applied to adjust 2024 benefit year risk scores and transfers, regardless of whether the exiting issuer is a negative or positive error rate outlier issuer. See the 2024 Payment Notice, 88 FR at 25790.

¹⁸ This report is available at <https://www.cms.gov/files/document/ra-report-by2024.pdf>.

¹⁹ See supra note 17.

To further explain Appendix B, issuers in State market risk pools with zero weighted average risk score error rates can generally expect no change to their 2024 benefit year risk adjustment transfer amount(s) as a result of HHS-RADV.²⁰ For issuers in State market risk pools with non-zero weighted average risk score error rates, issuers may apply the weighted average risk score error rate to the State average risk score to help understand the HHS-RADV impact in the same manner that issuers' risk score error rates are applied to issuers' risk scores – that is, a negative weighted average risk score error rate will increase a State average risk score, while a positive average risk score error rate will decrease a State average risk score. For zero error rate issuers in State risk pools with a non-zero weighted average risk score error rate:

- In State market risk pools with a negative weighted average risk score error rate, zero error rate issuers can generally expect their charge to increase, their payment to decrease, or a shift in the transfer amount from a payment to a charge, due to the State average risk score increasing.
- In State market risk pools with a positive weighted average risk score error rate, zero error rate issuers can generally expect their charge to decrease, their payment to increase, or a shift in the transfer amount from a charge to a payment, due to the State average risk score decreasing.

4. Next Steps

Information on the HHS-RADV adjustments to 2024 benefit year risk adjustment State transfers will be available when the Summary Report of 2024 Benefit Year Risk Adjustment Data Validation Adjustments to Risk Adjustment Transfers is released in July 2026.²¹

Error Rate Calculation Attestation and Discrepancy Reporting Process: All issuers subject to 2024 benefit year HHS-RADV are required to attest to the 2024 benefit year error rate calculation or qualify the attestation by filing a discrepancy.²² Beginning on June 24, 2026, issuers have 30 calendar days (that is, until July 24, 2026) to attest to findings or qualify their attestation with a discrepancy related to the 2024 benefit year HHS-RADV risk score error rate calculation. Issuers will need to attest by completing the Error Rate Attestation and Discrepancy Reporting Process in the HHS-RADV Audit Tool. A separate communication will be distributed to issuers with instructions for completing the HHS-RADV Error Rate Attestation and Discrepancy Form.

Issuers are encouraged to review their results and contact CMS with any questions at: CCIIOACARADatavalidation@cms.hhs.gov.

²⁰ In Appendix B below, there are instances in individual, small group, and catastrophic market risk pools where Appendix B shows 0.00% but a risk adjustment transfer amount change will occur. This is a result of the small non-zero value of the weighted average risk score error rate rounding to 0.00% at two decimal places. These values read as 0.00%. Values which read as “—” and are grayed out are represent values of zero out to the ninth decimal place, in which there will be no HHS-RADV adjustments to 2024 benefit year risk adjustment state transfer amounts.

²¹ See supra note 2.

²² Both outlier and non-outlier issuers are required to attest to their respective error rate calculation or qualify the attestation by filing a discrepancy. Exempt issuers are not subject to this requirement. See 45 CFR 153.630 (d)(2).

Appendix A. National Program Benchmarks – 2024 Benefit Year HHS-RADV

Table A1: National Failure Rate Group Summary Statistics for 2024 Benefit Year HHS-RADV

Failure Rate Group	Lower 99.7% CI Threshold*	Lower 90% CI Threshold*	National Weighted Mean*	Upper 90% CI Threshold*	Upper 99.7% CI Threshold*	Weighted Standard Deviation of GFR	Number of Outliers	Number of Outliers with Non-Zero Error Rate
Low	-0.278260575	-0.164202029	-0.02573243	0.112737169	0.226795714	0.084176048	44	32
Medium	-0.121106084	-0.046800374	0.043408402	0.133617179	0.207922889	0.054838162	41	41
High	-0.034292738	0.052244089	0.157301714	0.262359339	0.348896167	0.063864817	44	44

*Please note, these values indicate National Confidence Interval Point Values.

Table A2: National Error Rate Summary Statistics

Metric	2024
HIOS ID Count	436
Total # Issuers Receiving an Error Rate (+ or -)	77
Count of Issuers with Final Negative Error Rate	32
Average National Negative (Total) Error Rate	-0.017221849
Negative (Total) Error Rate (Max)	-0.054817237
Count of Issuers with Final Positive Error Rate	45
Average National Positive (Total) Error Rate	0.023170445
Positive (Total) Error Rate (Max)	0.168631257

Appendix B. 2024 Benefit Year Risk Adjustment State Market Risk Pool Weighted Average HHS-RADV Error Rates

Appendix B provides comparison information that shows which State market risk pools are impacted by 2024 benefit year HHS-RADV error rates due to the presence of at least one error rate outlier in the State market risk pool and the associated average error rates.^{23,24} Issuers’ 2024 benefit year HHS-RADV error rates will be used to calculate HHS-RADV adjustments to 2024 benefit year risk adjustment State transfers. For more information on interpreting this table, refer to Section 4. Impact of HHS-RADV Error Rates and Outlier Status on 2024 Benefit Year Risk Adjustment Transfers on page 8.

State	Individual (Excluding Catastrophic)	Small Group	Catastrophic
AK	0.01%	0.00%	N/A
AL	2.82%	4.80%	4.89%
AR	--	--	N/A
AZ	0.00%	0.08%	--
CA	0.01%	0.10%	0.02%
CO	-0.15%	0.00%	-0.04%
CT	--	0.02%	--
DC	--	--	--
DE	-0.02%	0.03%	--
FL	--	--	--
GA	-0.19%	--	--
HI	0.49%	0.33%	0.69%
IA	--	--	--
ID	--	--	--
IL	-0.12%	-0.10%	-0.13%
IN	-1.04%	-2.32%	N/A
KS	--	--	--
KY	--	--	--
LA	0.06%	0.04%	N/A
MA	1.90%	N/A	5.90%
MD	-0.26%	0.04%	-0.11%
ME	0.09%	N/A	--
MI	-0.02%	0.01%	-0.01%
MN	--	--	--
MO	-0.28%	-0.16%	-0.38%

State	Individual (Excluding Catastrophic)	Small Group	Catastrophic
MS	-0.53%	3.56%	N/A
MT	--	--	--
NC	-0.03%	0.01%	0.00%
ND	--	0.00%	--
NE	0.01%	0.01%	--
NH	-0.09%	-0.11%	-0.14%
NJ	--	--	--
NM	--	--	N/A
NV	0.05%	0.16%	0.10%
NY	-0.05%	-0.09%	-0.04%
OH	-0.13%	-0.25%	-0.14%
OK	-0.06%	--	-0.04%
OR	--	--	N/A
PA	0.00%	0.05%	0.00%
RI	0.79%	0.12%	N/A
SC	-0.03%	--	--
SD	--	--	--
TN	-0.18%	-0.17%	--
TX	0.11%	0.00%	0.14%
UT	-0.02%	--	N/A
VA	0.01%	0.08%	--
VT	--	--	--
WA	--	--	--
WI	-0.06%	-0.19%	0.09%
WV	--	--	--
WY	--	--	N/A

- Notes:** (1) “N/A” represents States with no issuers operating in that state market risk pool and are therefore grayed out. (2) Values for the merged market States (Massachusetts and Maine) are displayed in the Individual (Excluding Catastrophic) column with an “N/A” in the small group column. (3) Values which read “--” and are grayed out are values of zero out to the ninth decimal place; values which read “0.00%” and are not grayed out are very small values that round to 0.00%.

²³ The state market risk pool weighted average risk score error rate is calculated by taking the weighted average of issuers’ error rates among all issuers within the state market risk pool. The weight for an issuer is equal to the total risk score of the issuer within the state market risk pool, which is calculated as the summation of the plan liability risk score multiplied by the plan-level billable member months among all plans for the issuer within the state market risk pool.

²⁴ We note that the state market risk pool weighted average risk score error rates account for all risk adjustment EDGE discrepancies to date. The information on impacted state market risk pools in this appendix is subject to change as it does not consider any adjustments for any potential actionable HHS-RADV discrepancies or successful HHS-RADV appeals.

Appendix C. 2024 Benefit Year HHS-RADV Failure Rate Group Definitions

provides a listing of HCCs, the associated Super HCC, and the group detail for the 2024 benefit year HHS-RADV.

Super HCC	RA Age Group Model(s)	Failure Rate Group	HCC	HCC Label ²⁵
1	Adult, Child	Medium Failure Rate Group	1	HIV/AIDS
2	Adult, Child	Medium Failure Rate Group	2	Septicemia, Sepsis, Systemic Inflammatory Response Syndrome/Shock
3	Adult, Child	High Failure Rate Group	3	Central Nervous System Infections, Except Viral Meningitis
4	Adult, Child	Low Failure Rate Group	4	Viral or Unspecified Meningitis
6	Adult, Child	High Failure Rate Group	6	Opportunistic Infections
8	Adult, Child	High Failure Rate Group	8	Metastatic Cancer
9	Adult, Child	High Failure Rate Group	9	Lung, Brain, and Other Severe Cancers, Including Pediatric Acute Lymphoid Leukemia
10	Adult, Child	High Failure Rate Group	10	Non-Hodgkin Lymphomas and Other Cancers and Tumors
11	Adult, Child	High Failure Rate Group	11	Colorectal, Breast (Age < 50), Kidney, and Other Cancers
12	Adult, Child	High Failure Rate Group	12	Breast (Age 50+) and Prostate Cancer, Benign/Uncertain Brain Tumors, and Other Cancers and Tumors
13	Adult, Child	High Failure Rate Group	13	Thyroid Cancer, Melanoma, Neurofibromatosis, and Other Cancers and Tumors
18	Child	High Failure Rate Group	18	Pancreas Transplant Status
G24	Adult	Medium Failure Rate Group	18	Pancreas Transplant Status
			183	Kidney Transplant Status/Complications
G01	Adult, Child	Medium Failure Rate Group	19	Diabetes with Acute Complications
			20	Diabetes with Chronic Complications
			21	Diabetes without Complication
22	Adult	High Failure Rate Group	22	Type 1 Diabetes Mellitus, add-on to Diabetes HCCs 19-21
23	Adult, Child	Low Failure Rate Group	23	Protein-Calorie Malnutrition
G02B	Adult, Child	High Failure Rate Group	26	Mucopolysaccharidosis
			27	Lipidoses and Glycogenosis
G02D	Child	High Failure Rate Group	28	Congenital Metabolic Disorders, Not Elsewhere Classified
			29	Amyloidosis, Porphyria, and Other Metabolic Disorders
29	Adult	High Failure Rate Group	29	Amyloidosis, Porphyria, and Other Metabolic Disorders
30	Adult, Child	Low Failure Rate Group	30	Adrenal, Pituitary, and Other Significant Endocrine Disorders
34	Adult, Child	High Failure Rate Group	34	Liver Transplant Status/Complications
35_1	Adult, Child	High Failure Rate Group	35_1	Acute Liver Failure/Disease, Including Neonatal Hepatitis
35_2	Adult, Child	Low Failure Rate Group	35_2	Chronic Liver Failure/End-Stage Liver Disorders
36	Adult, Child	Medium Failure Rate Group	36	Cirrhosis of Liver
37_1	Adult, Child	High Failure Rate Group	37_1	Chronic Viral Hepatitis C
37_2	Adult, Child	Medium Failure Rate Group	37_2	Chronic Hepatitis, Except Chronic Viral Hepatitis C

²⁵ For information regarding which Infant HCCs map to the Infant Super HCCs in this table, see DIY Table 8: Additional Infant Variables located at <https://www.cms.gov/files/document/cy2024-diy-tables-04092025.xlsx>. See also the 2024 HHS-RADV Protocols, Appendix E, available at: https://regtap.cms.gov/reg_librarye.php?i=5881:HYPERLINK "https://regtap.cms.gov/reg_librarye.php?i=5881"https://regtap.cms.gov/reg_librarye.php?i=5881

Super HCC	RA Age Group Model(s)	Failure Rate Group	HCC	HCC Label ²⁵
41	Adult, Child	High Failure Rate Group	41	Intestine Transplant Status/Complications
42	Adult, Child	High Failure Rate Group	42	Peritonitis/Gastrointestinal Perforation/Necrotizing Enterocolitis
45	Adult, Child	High Failure Rate Group	45	Intestinal Obstruction
46	Adult, Child	Low Failure Rate Group	46	Chronic Pancreatitis
47	Adult, Child	Low Failure Rate Group	47	Acute Pancreatitis
48	Adult, Child	Medium Failure Rate Group	48	Inflammatory Bowel Disease
54	Adult	High Failure Rate Group	54	Necrotizing Fasciitis
55	Adult	Medium Failure Rate Group	55	Bone/Joint/Muscle Infections/Necrosis
G03	Child	High Failure Rate Group	54	Necrotizing Fasciitis
			55	Bone/Joint/Muscle Infections/Necrosis
56	Adult, Child	Low Failure Rate Group	56	Rheumatoid Arthritis and Specified Autoimmune Disorders
57	Adult, Child	High Failure Rate Group	57	Systemic Lupus Erythematosus and Other Autoimmune Disorders
G04	Adult, Child	Medium Failure Rate Group	61	Osteogenesis Imperfecta and Other Osteodystrophy
			62	Congenital/Developmental Skeletal and Connective Tissue Disorders
63	Adult, Child	High Failure Rate Group	63	Cleft Lip/Cleft Palate
66	Adult, Child	Low Failure Rate Group	66	Hemophilia
G06A	Adult, Child	High Failure Rate Group	67	Myelodysplastic Syndromes and Myelofibrosis
			68	Aplastic Anemia
			69	Acquired Hemolytic Anemia, Including Hemolytic Disease of Newborn
G07A	Adult, Child	High Failure Rate Group	70	Sickle Cell Anemia (Hb-SS)
			71	Beta Thalassemia Major
G08	Adult, Child	Low Failure Rate Group	73	Combined and Other Severe Immunodeficiencies
			74	Disorders of the Immune Mechanism
75	Adult, Child	Low Failure Rate Group	75	Coagulation Defects and Other Specified Hematological Disorders
G09A	Adult, Child	High Failure Rate Group	81	Drug Use with Psychotic Complications
			82	Drug Use Disorder, Moderate/Severe, or Drug Use with Non-Psychotic Complications
G09C	Adult, Child	Low Failure Rate Group	83	Alcohol Use with Psychotic Complications
			84	Alcohol Use Disorder, Moderate/Severe, or Alcohol Use with Specified Non-Psychotic Complications
87_1	Adult, Child	Medium Failure Rate Group	87_1	Schizophrenia
87_2	Adult, Child	Low Failure Rate Group	87_2	Delusional and Other Specified Psychotic Disorders, Unspecified Psychosis
88	Adult, Child	High Failure Rate Group	88	Major Depressive Disorder, Severe, and Bipolar Disorders
90	Adult, Child	High Failure Rate Group	90	Personality Disorders
94	Adult, Child	High Failure Rate Group	94	Anorexia/Bulimia Nervosa
96	Adult, Child	Low Failure Rate Group	96	Prader-Willi, Patau, Edwards, and Autosomal Deletion Syndromes
97	Adult, Child	High Failure Rate Group	97	Down Syndrome, Fragile X, Other Chromosomal Anomalies, and Congenital Malformation Syndromes

Super HCC	RA Age Group Model(s)	Failure Rate Group	HCC	HCC Label ²⁵
102	Adult, Child	High Failure Rate Group	102	Autistic Disorder
103	Adult, Child	High Failure Rate Group	103	Pervasive Developmental Disorders, Except Autistic Disorder
G10	Adult, Child	Medium Failure Rate Group	106	Traumatic Complete Lesion Cervical Spinal Cord
			107	Quadriplegia
G11	Adult, Child	Low Failure Rate Group	108	Traumatic Complete Lesion Dorsal Spinal Cord
			109	Paraplegia
110	Adult, Child	High Failure Rate Group	110	Spinal Cord Disorders/Injuries
111	Adult, Child	High Failure Rate Group	111	Amyotrophic Lateral Sclerosis and Other Anterior Horn Cell Disease
112	Adult, Child	Low Failure Rate Group	112	Quadriplegic Cerebral Palsy
113	Adult, Child	High Failure Rate Group	113	Cerebral Palsy, Except Quadriplegic
114	Adult, Child	Low Failure Rate Group	114	Spina Bifida and Other Brain/Spinal/Nervous System Congenital Anomalies
115	Adult, Child	Low Failure Rate Group	115	Myasthenia Gravis/Myoneural Disorders and Guillain-Barre Syndrome/Inflammatory and Toxic Neuropathy
G12	Adult, Child	High Failure Rate Group	117	Muscular Dystrophy
			119	Parkinson's, Huntington's, and Spinocerebellar Disease, and Other Neurodegenerative Disorders
118	Adult, Child	Low Failure Rate Group	118	Multiple Sclerosis
120	Adult, Child	Medium Failure Rate Group	120	Seizure Disorders and Convulsions
121	Adult, Child	Low Failure Rate Group	121	Hydrocephalus
122	Adult, Child	Low Failure Rate Group	122	Nontraumatic Coma, Except Diabetic, Hepatic, or Hypoglycemic; Nontraumatic Brain Compression/Anoxic Damage
123	Adult, Child	High Failure Rate Group	123	Narcolepsy and Cataplexy
125	Adult, Child	High Failure Rate Group	125	Respirator Dependence/Tracheostomy Status
G13	Adult, Child	Low Failure Rate Group	126	Respiratory Arrest
			127	Cardio-Respiratory Failure and Shock, Including Respiratory Distress Syndromes
G14	Adult, Child	Medium Failure Rate Group	128	Heart Assistive Device/Artificial Heart
			129	Heart Transplant Status/Complications
130	Adult, Child	Medium Failure Rate Group	130	Heart Failure
131	Adult	High Failure Rate Group	131	Acute Myocardial Infarction
132	Adult	High Failure Rate Group	132	Unstable Angina and Other Acute Ischemic Heart Disease
G23	Child	High Failure Rate Group	131	Acute Myocardial Infarction
			132	Unstable Angina and Other Acute Ischemic Heart Disease
135	Adult, Child	Low Failure Rate Group	135	Heart Infection/Inflammation, Except Rheumatic
137	Child	High Failure Rate Group	137	Hypoplastic Left Heart Syndrome and Other Severe Congenital Heart Disorders
138	Child	High Failure Rate Group	138	Major Congenital Heart/Circulatory Disorders
139	Child	High Failure Rate Group	139	Atrial and Ventricular Septal Defects, Patent Ductus Arteriosus, and Other Congenital Heart/Circulatory Disorders
G21	Adult	High Failure Rate Group	137	Hypoplastic Left Heart Syndrome and Other Severe Congenital Heart Disorders

Super HCC	RA Age Group Model(s)	Failure Rate Group	HCC	HCC Label ²⁵
			138	Major Congenital Heart/Circulatory Disorders
			139	Atrial and Ventricular Septal Defects, Patent Ductus Arteriosus, and Other Congenital Heart/Circulatory Disorders
142	Adult, Child	Low Failure Rate Group	142	Specified Heart Arrhythmias
145	Adult, Child	High Failure Rate Group	145	Intracranial Hemorrhage
146	Adult, Child	High Failure Rate Group	146	Ischemic or Unspecified Stroke
149	Adult, Child	High Failure Rate Group	149	Cerebral Aneurysm and Arteriovenous Malformation
150	Adult, Child	Low Failure Rate Group	150	Hemiplegia/Hemiparesis
151	Adult, Child	Medium Failure Rate Group	151	Monoplegia, Other Paralytic Syndromes
153	Adult, Child	Low Failure Rate Group	153	Atherosclerosis of the Extremities with Ulceration or Gangrene
154	Adult, Child	High Failure Rate Group	154	Vascular Disease with Complications
156	Adult, Child	High Failure Rate Group	156	Pulmonary Embolism and Deep Vein Thrombosis
158	Adult, Child	High Failure Rate Group	158	Lung Transplant Status/Complications
159	Adult, Child	Medium Failure Rate Group	159	Cystic Fibrosis
160	Child	Low Failure Rate Group	160	Chronic Obstructive Pulmonary Disease, Including Bronchiectasis
161_1	Child	High Failure Rate Group	161_1	Severe Asthma
161_2	Child	High Failure Rate Group	161_2	Asthma, Except Severe
G15A	Adult	Medium Failure Rate Group	160	Chronic Obstructive Pulmonary Disease, Including Bronchiectasis
			161_1	Severe Asthma
			161_2	Asthma, Except Severe
162	Adult, Child	Medium Failure Rate Group	162	Fibrosis of Lung and Other Lung Disorders
163	Adult, Child	Low Failure Rate Group	163	Aspiration and Specified Bacterial Pneumonias and Other Severe Lung Infections
174	Adult	High Failure Rate Group	174	Exudative Macular Degeneration
183	Child	Low Failure Rate Group	183	Kidney Transplant Status/Complications
184	Adult, Child	High Failure Rate Group	184	End Stage Renal Disease
G16	Adult, Child	Medium Failure Rate Group	187	Chronic Kidney Disease, Stage 5
			188	Chronic Kidney Disease, Severe (Stage 4)
203	Adult, Child	High Failure Rate Group	203	Ectopic and Molar Pregnancy
G17A	Adult, Child	High Failure Rate Group	204	Miscarriage with Complications
			205	Miscarriage with No or Minor Complications
G18A	Adult, Child	High Failure Rate Group	207	Pregnancy with Delivery with Major Complications
			208	Pregnancy with Delivery with Complications
209	Adult, Child	Low Failure Rate Group	209	Pregnancy with Delivery with No or Minor Complications
210	Adult	High Failure Rate Group	210	(Ongoing) Pregnancy without Delivery with Major Complications
211	Adult	Medium Failure Rate Group	211	(Ongoing) Pregnancy without Delivery with Complications
G19B	Child	Low Failure Rate Group	210	(Ongoing) Pregnancy without Delivery with Major Complications
			211	(Ongoing) Pregnancy without Delivery with Complications
212	Adult, Child	High Failure Rate Group	212	(Ongoing) Pregnancy without Delivery with No or Minor Complications
217	Adult, Child	Medium Failure Rate Group	217	Chronic Ulcer of Skin, Except Pressure
218	Adult, Child	High Failure Rate Group	218	Extensive Third Degree Burns

Super HCC	RA Age Group Model(s)	Failure Rate Group	HCC	HCC Label ²⁵
219	Adult, Child	High Failure Rate Group	219	Major Skin Burn or Condition
223	Adult, Child	High Failure Rate Group	223	Severe Head Injury
226	Adult, Child	High Failure Rate Group	226	Hip and Pelvic Fractures
228	Adult, Child	High Failure Rate Group	228	Vertebral Fractures without Spinal Cord Injury
234	Adult	High Failure Rate Group	234	Traumatic Amputations and Amputation Complications
G22	Child	Low Failure Rate Group	234	Traumatic Amputations and Amputation Complications
			254	Amputation Status, Upper Limb or Lower Limb
251	Adult, Child	Low Failure Rate Group	251	Stem Cell, Including Bone Marrow, Transplant Status/Complications
253	Adult, Child	Low Failure Rate Group	253	Artificial Openings for Feeding or Elimination
254	Adult	Low Failure Rate Group	254	Amputation Status, Upper Limb or Lower Limb
AGE1_X_SEVERITY1	Infant	Low Failure Rate Group		
AGE1_X_SEVERITY2	Infant	High Failure Rate Group		
AGE1_X_SEVERITY3	Infant	Low Failure Rate Group		
AGE1_X_SEVERITY4	Infant	Low Failure Rate Group		
AGE1_X_SEVERITY5	Infant	High Failure Rate Group		
EXTREMELY_IMMATURE_X_SEVERITY1	Infant	High Failure Rate Group		
EXTREMELY_IMMATURE_X_SEVERITY3	Infant	Low Failure Rate Group		
EXTREMELY_IMMATURE_X_SEVERITY4	Infant	High Failure Rate Group		
EXTREMELY_IMMATURE_X_SEVERITY5	Infant	High Failure Rate Group		
IMMATURE_X_SEVERITY1	Infant	High Failure Rate Group		
IMMATURE_X_SEVERITY2	Infant	High Failure Rate Group		
IMMATURE_X_SEVERITY3	Infant	Low Failure Rate Group		
IMMATURE_X_SEVERITY4	Infant	Medium Failure Rate Group		
IMMATURE_X_SEVERITY5	Infant	High Failure Rate Group		
PREMATURE_MULTIPLE	Infant	Low Failure Rate Group		

Super HCC	RA Age Group Model(s)	Failure Rate Group	HCC	HCC Label ²⁵
ES_X_SEVERITY1				
PREMATURE_MULTIPLE_SEVERITY2	Infant	High Failure Rate Group		
PREMATURE_MULTIPLE_SEVERITY3	Infant	Low Failure Rate Group		
PREMATURE_MULTIPLE_SEVERITY4	Infant	Low Failure Rate Group		
PREMATURE_MULTIPLE_SEVERITY5	Infant	High Failure Rate Group		
TERM_X_SEVERITY1	Infant	Medium Failure Rate Group		
TERM_X_SEVERITY2	Infant	High Failure Rate Group		
TERM_X_SEVERITY3	Infant	Low Failure Rate Group		
TERM_X_SEVERITY4	Infant	High Failure Rate Group		
TERM_X_SEVERITY5	Infant	High Failure Rate Group		

Appendix D. 2024 Benefit Year HHS-RADV HCC Validation

Appendix D provides the validation count and rate for each single HCC, with adult, child, and infant models combined, based on all issuers' 2024 benefit year HHS-RADV results. The All Enrollees included in Error Estimation Calculation represents the total count of a specific HCC submitted to the EDGE server, aggregated across all issuers' IVA samples (or SVA samples, if applicable) and the Validated count indicates the total aggregated count of an HCC that was validated as an exact match by the IVA (or SVA) entity. Note that this validation count strictly includes only one-to-one matches; it does not include instances where the auditor found a new HCC (not originally on EDGE) or substantiated the submission with a different HCC, even if it was within the same hierarchy. Lastly, the Validated Percentage column is the percentage of submitted HCCs that were validated as an exact match or simply the Validated count divided by the Sample Count Across All Issuers.

HCC	HCC Label	All Enrollees included in Error Estimation Calculation	Validated	Validated Percentage
1	HIV/AIDS	2216	2051	93%
2	Septicemia, Sepsis, Systemic Inflammatory Response Syndrome/Shock	9637	8507	88%
3	Central Nervous System Infections, Except Viral Meningitis	783	582	74%
4	Viral or Unspecified Meningitis	151	95	63%
6	Opportunistic Infections	1033	784	76%
8	Metastatic Cancer	11547	9819	85%
9	Lung, Brain, and Other Severe Cancers, Including Pediatric Acute Lymphoid Leukemia	2560	1740	68%
10	Non-Hodgkin Lymphomas and Other Cancers and Tumors	1409	1112	79%
11	Colorectal, Breast (Age < 50), Kidney, and Other Cancers	1147	526	46%
12	Breast (Age 50+) and Prostate Cancer, Benign/Uncertain Brain Tumors, and Other Cancers and Tumors	2142	1364	64%
13	Thyroid Cancer, Melanoma, Neurofibromatosis, and Other Cancers and Tumors	444	189	43%
18	Pancreas Transplant Status	63	57	90%
19	Diabetes with Acute Complications	1023	735	72%
20	Diabetes with Chronic Complications	9815	8521	87%
21	Diabetes without Complication	8180	6301	77%
22	Type 1 Diabetes Mellitus, add-on to Diabetes HCCs 19-21	1740	1358	78%
23	Protein-Calorie Malnutrition	6470	5624	87%
26	Mucopolysaccharidosis	35	24	69%
27	Lipidoses and Glycogenesis	417	332	80%
28	Congenital Metabolic Disorders, Not Elsewhere Classified	75	62	83%
29	Amyloidosis, Porphyria, and Other Metabolic Disorders	888	618	70%
30	Adrenal, Pituitary, and Other Significant Endocrine Disorders	4948	4218	85%
34	Liver Transplant Status/Complications	410	331	81%
36	Cirrhosis of Liver	860	639	74%
41	Intestine Transplant Status/Complications	9	6	67%
42	Peritonitis/Gastrointestinal Perforation/Necrotizing Enterocolitis	1978	1551	78%
45	Intestinal Obstruction	2789	2148	77%
46	Chronic Pancreatitis	675	565	84%
47	Acute Pancreatitis	820	654	80%
48	Inflammatory Bowel Disease	3877	3568	92%
54	Necrotizing Fasciitis	301	239	79%
55	Bone/Joint/Muscle Infections/Necrosis	2342	1961	84%
56	Rheumatoid Arthritis and Specified Autoimmune Disorders	5038	4645	92%
57	Systemic Lupus Erythematosus and Other Autoimmune Disorders	1536	1181	77%
61	Osteogenesis Imperfecta and Other Osteodystrophies	58	37	64%
62	Congenital/Developmental Skeletal and Connective Tissue Disorders	532	466	88%

HCC	HCC Label	All Enrollees included in Error Estimation Calculation	Validated	Validated Percentage
63	Cleft Lip/Cleft Palate	58	45	78%
64	Major Congenital Anomalies of Diaphragm, Abdominal Wall, and Esophagus, Age < 2	37	33	89%
66	Hemophilia	280	271	97%
67	Myelodysplastic Syndromes and Myelofibrosis	382	285	75%
68	Aplastic Anemia	205	128	62%
69	Acquired Hemolytic Anemia, Including Hemolytic Disease of Newborn	474	328	69%
70	Sickle Cell Anemia (Hb-SS)	128	104	81%
71	Beta Thalassemia Major	60	43	72%
73	Combined and Other Severe Immunodeficiencies	56	44	79%
74	Disorders of the Immune Mechanism	6869	5971	87%
75	Coagulation Defects and Other Specified Hematological Disorders	5083	4175	82%
81	Drug Use with Psychotic Complications	144	106	74%
82	Drug Use Disorder, Moderate/Severe, or Drug Use with Non-Psychotic Complications	4276	3267	76%
83	Alcohol Use with Psychotic Complications	337	240	71%
84	Alcohol Use Disorder, Moderate/Severe, or Alcohol Use with Specified Non-Psychotic Complications	2616	2140	82%
88	Major Depressive Disorder, Severe, and Bipolar Disorders	4897	3992	82%
90	Personality Disorders	259	165	64%
94	Anorexia/Bulimia Nervosa	249	189	76%
96	Prader-Willi, Patau, Edwards, and Autosomal Deletion Syndromes	181	153	85%
97	Down Syndrome, Fragile X, Other Chromosomal Anomalies, and Congenital Malformation Syndromes	424	309	73%
102	Autistic Disorder	559	470	84%
103	Pervasive Developmental Disorders, Except Autistic Disorder	46	32	70%
106	Traumatic Complete Lesion Cervical Spinal Cord	17	3	18%
107	Quadriplegia	335	266	79%
108	Traumatic Complete Lesion Dorsal Spinal Cord	11	5	45%
109	Paraplegia	314	249	79%
110	Spinal Cord Disorders/Injuries	1066	822	77%
111	Amyotrophic Lateral Sclerosis and Other Anterior Horn Cell Disease	157	115	73%
112	Quadriplegic Cerebral Palsy	105	95	90%
113	Cerebral Palsy, Except Quadriplegic	135	108	80%
114	Spina Bifida and Other Brain/Spinal/Nervous System Congenital Anomalies	654	500	76%
115	Myasthenia Gravis/Myoneural Disorders and Guillain-Barre Syndrome/Inflammatory and Toxic Neuropathy	3000	2435	81%
117	Muscular Dystrophy	101	84	83%
118	Multiple Sclerosis	2077	1964	95%
119	Parkinson's, Huntington's, and Spinocerebellar Disease, and Other Neurodegenerative Disorders	399	314	79%
120	Seizure Disorders and Convulsions	4532	3921	87%
121	Hydrocephalus	594	518	87%
122	Nontraumatic Coma, Except Diabetic, Hepatic, or Hypoglycemic; Nontraumatic Brain Compression/Anoxic Damage	2438	2004	82%
123	Narcolepsy and Cataplexy	302	256	85%
125	Respirator Dependence/Tracheostomy Status	2638	1336	51%
126	Respiratory Arrest	52	24	46%
127	Cardio-Respiratory Failure and Shock, Including Respiratory Distress Syndromes	10103	8683	86%
128	Heart Assistive Device/Artificial Heart	184	135	73%
129	Heart Transplant Status/Complications	236	188	80%
130	Heart Failure	10227	8948	87%

HCC	HCC Label	All Enrollees included in Error Estimation Calculation	Validated	Validated Percentage
131	Acute Myocardial Infarction	3372	2485	74%
132	Unstable Angina and Other Acute Ischemic Heart Disease	1123	701	62%
135	Heart Infection/Inflammation, Except Rheumatic	2092	1711	82%
137	Hypoplastic Left Heart Syndrome and Other Severe Congenital Heart Disorders	176	112	64%
138	Major Congenital Heart/Circulatory Disorders	1207	877	73%
139	Atrial and Ventricular Septal Defects, Patent Ductus Arteriosus, and Other Congenital Heart/Circulatory Disorders	1302	961	74%
142	Specified Heart Arrhythmias	8063	7211	89%
145	Intracranial Hemorrhage	1741	1305	75%
146	Ischemic or Unspecified Stroke	1863	1041	56%
149	Cerebral Aneurysm and Arteriovenous Malformation	314	228	73%
150	Hemiplegia/Hemiparesis	1827	1593	87%
151	Monoplegia, Other Paralytic Syndromes	204	88	43%
153	Atherosclerosis of the Extremities with Ulceration or Gangrene	1275	984	77%
154	Vascular Disease with Complications	1490	1038	70%
156	Pulmonary Embolism and Deep Vein Thrombosis	4663	3309	71%
158	Lung Transplant Status/Complications	132	97	73%
159	Cystic Fibrosis	427	393	92%
160	Chronic Obstructive Pulmonary Disease, Including Bronchiectasis	6891	6063	88%
162	Fibrosis of Lung and Other Lung Disorders	1439	1148	80%
163	Aspiration and Specified Bacterial Pneumonias and Other Severe Lung Infections	3176	2638	83%
174	Exudative Macular Degeneration	94	80	85%
183	Kidney Transplant Status/Complications	790	698	88%
184	End Stage Renal Disease	2706	2227	82%
187	Chronic Kidney Disease, Stage 5	158	53	34%
188	Chronic Kidney Disease, Severe (Stage 4)	614	488	79%
203	Ectopic and Molar Pregnancy	75	32	43%
204	Miscarriage with Complications	14	7	50%
205	Miscarriage with No or Minor Complications	207	163	79%
207	Pregnancy with Delivery with Major Complications	264	181	69%
208	Pregnancy with Delivery with Complications	838	618	74%
209	Pregnancy with Delivery with No or Minor Complications	582	462	79%
210	(Ongoing) Pregnancy without Delivery with Major Complications	62	32	52%
211	(Ongoing) Pregnancy without Delivery with Complications	244	148	61%
212	(Ongoing) Pregnancy without Delivery with No or Minor Complications	562	360	64%
217	Chronic Ulcer of Skin, Except Pressure	1945	1386	71%
218	Extensive Third Degree Burns	38	25	66%
219	Major Skin Burn or Condition	154	106	69%
223	Severe Head Injury	66	28	42%
226	Hip and Pelvic Fractures	824	656	80%
228	Vertebral Fractures without Spinal Cord Injury	1123	838	75%
234	Traumatic Amputations and Amputation Complications	198	93	47%
242	Extremely Immature Newborns, Birthweight < 500 Grams	31	16	52%
243	Extremely Immature Newborns, Including Birthweight 500-749 Grams	123	99	80%
244	Extremely Immature Newborns, Including Birthweight 750-999 Grams	182	142	78%
245	Premature Newborns, Including Birthweight 1000-1499 Grams	245	198	81%
246	Premature Newborns, Including Birthweight 1500-1999 Grams	378	321	85%
247	Premature Newborns, Including Birthweight 2000-2499 Grams	271	236	87%
248	Other Premature, Low Birthweight, Malnourished, or Multiple Birth Newborns	351	275	78%
249	Term or Post-Term Singleton Newborn, Normal or High Birthweight	1244	1073	86%
251	Stem Cell, Including Bone Marrow, Transplant Status/Complications	1294	1210	94%

HCC	HCC Label	All Enrollees included in Error Estimation Calculation	Validated	Validated Percentage
253	Artificial Openings for Feeding or Elimination	3721	3256	88%
254	Amputation Status, Upper Limb or Lower Limb	329	246	75%
161 1	Severe Asthma	328	264	80%
161 2	Asthma, Except Severe	8836	7457	84%
35 1	Acute Liver Failure/Disease, Including Neonatal Hepatitis	1151	888	77%
35 2	Chronic Liver Failure/End-Stage Liver Disorders	1470	1259	86%
37 1	Chronic Viral Hepatitis C	479	367	77%
37 2	Chronic Hepatitis, Except Chronic Viral Hepatitis C	537	429	80%
87 1	Schizophrenia	829	687	83%
87 2	Delusional and Other Specified Psychotic Disorders, Unspecified Psychosis	539	393	73%